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<110> Steven M. Ruben, et al.

<120> 32 Human Secreted Proteins

<130> PZ006P1

<140> Unassigned
<141> 1998-11-10

<150> PCT/US98/10868
<151> May 28, 1998

<150> 60/044,039
<151> May 30, 1997

<150> 60/048,093
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<150> 60/048,190
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<150> 60/050,935
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<150> 60/048,101
<151> May 30, 1997

<150> 60/048,356
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<150> 60/056,250
<151> August 29, 1997

<150> 60/056,296
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<150> 60/056,293
<151> August 29, 1997

<160> 229

<170> PatentIn Ver. 2.0


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tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg     180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg     240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact     300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg     360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc     420
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ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg      600
acaagagcag gtggcagcag gggaactgtct tctcatgctc cgtgatgcat gaggctctgc      660
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gactctagag gat                                                         733


<210> 2
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<212> PRT
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<223> Xaa equals any of the twenty naturally ocurring L-amino acids

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<213> Homo sapiens

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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttttat      180
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cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga     180
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<213> Homo sapiens

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<220>
<221> SITE
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<400> 11
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tgaccctcaa gtatgaaatc aagaagctga tctacgtaca tctggtcata tggctgctgc     240
tggttgctaa gatgagcgtg ggacacctga ggctcttgtc acatgatcag gtggccatgc     300
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aatgagcttc gtccttgcct ctactcggtc attctcccca tttccatcca ttacccctta     960
gccattgaga ctaaaggaaa tagggaataa atcaaattac ttcatctcta ggtcacgggt    1020
caggaaacat ttggggcagct gctccccttgg cagctgtggt ctcctctgca aagcatttta    1080
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agtgaagaag atcaggctgc tgagcttcgt gcttatctga aatctaaagg agctgagatt     180
tcagaagaga actcggaagg tggacttcat gttgatttag ctcaaattat tgaagcctgt     240
gatgtgtgtc tgaaggagga tgataaagat gttgaaagtg tgatgaacag tgtggtatcc     300
ctactcttga tcctggaacc agacaagcaa gaagctttga ttgaaagct atgtgaaaag     360
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agaaaagtag ttgtcagtca tagcacacat cggacatttg gaaaacagca gtggcaacaa    1140
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agtctttctg atacctgagt ttttatgctt ataattttg ttctttgaaa aaaaagccct    1260
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        <220>
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        <223> n equals a,t,g, or c

        <220>
        <221> SITE
        <222> (968)
        <223> n equals a,t,g, or c

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        <222> (1139)
        <223> n equals a,t,g, or c

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        cattgcctgg gangaagtct gtcaacaaag tgacatgtct agtctgccgg aagggtgaca      180
        atgatgagtt tcttctgctt tgtgatgggt gtraccgtgg ctgccacatt tactgccatc      240
        gtcccaagat ggaggctgtc ccagaaggag attggttctg tactgtctgt ttggctcagc      300
        aggtggaggg agaattcact cagaagcctg gtttcccaaa gcgtggccag aagcggaaaa      360
        gtggttattc gctgaacttc tcagaggtg atggccgccg acgccgggta ctgttgaggg      420
        gccgagaaag cccagcagca gggcctcggt actcggaaga agggctctcc ccctccaagc      480
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        tgagtgggta ccggcgcatc atcaaaaatc ctatggattt ttccaccatg cgggagcggc      660
        tgctcagggg agggtacacc agctcagagg agtttgcggc tgatgccctc ctggtatttg      720
        acaactgcca gactttcaac gaggatgact ctgaagtagg caaggctggg cacatcatgc      780
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        gcaagggagg tggggagtca ccttgtggca tctcccccca ccttccaaac aaaaacctgc      900
        cattttcacc tgctgatgct gccctgggtc cagactcaag tcagatacaa ccctgatttt      960
        tgaccttncc cttggcagtg ccccacatcc tcttattcct acatcccttt ctcccttccc     1020
        tcctcttgct cctcaagtaa gaggtgcaga gatgaggtcc ttctggacta aaagccaaaa     1080
        aaagaaagaa aaaaawaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaan     1139


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cattaaactc ctagtgccct cccctgaggg catgagtgag atctacctgc ggtgccagga      780
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cgactggccc gtgggcgacg tggtcaagac ctggcgtttc agcaacatgc gccagtggaa     1260
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<223> n equals a,t,g, or c

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gggcggccgg gcagggggaag gggcctggcc gccacctgct cactctccag tccttccac      180
ctcctcccta cccttctaca cacgttctct ttctccctcc cgcctccgtc ccctgctgcc      240
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gaccccacct acacaggggc attgacagac tggagttgaa agccgacgaa ccgacacgcg      360
gcagagtcaa taattcaata aaaaagttac gaactttctc tgtaacttgg gtttcaataa      420
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agtcggaatg caaacttttg acgtcctgat tgctccaggg ccctctttcc aactcagttt      540
cttgtttttc ctcttcctcc tcctcctctt cttcctcctt tctttctctt nccccatggg      600
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<212> DNA
<213> Homo sapiens


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ggccatccag acagtgcggg cccggcagag cctcgggacc gggaccctcg tgtcctaaac     240
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ctcctggggg tctcctgctg cttaggtcct tttgggaccc ccacccatcc aggcccttt     840
tttgcacact tcttccccca cctctaygca tcttcccccc actgcggtgt tcggcctgaa     900
ggtggtgggg gtgagggggg gtttggccat tagcatttca tgtctttccc caaatgaaga     960
tgccctgcaa agggcagtna accacaaaaa aaaaaaaaaa aaaaactgg gggggggcc    1020
ccgttaacca ttttggcctn atagggggggn ggttttaaa aattaattgg gcccgg       1076
```

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<210> 18
<211> 1379
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (639)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (697)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<222> (1347)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1361)
<223> n equals a,t,g, or c


<400> 18
ggcacgagca ccctcccaca cctccctgaa cttccatctg atcgacttca acttgctgat        60
ggtgaccacc atcgttctgg gccgccgctt cattgggtcc atcgtgaagg aggcctctca       120
gaggggaag gtctccctct ttcgctccat cctgctgttc ctcactcgct tcaccgttct        180
cacggcaaca ggctggagtc tgtgccgatc cctcatccac ctcttcagga cctactcctt       240
cctgaacctc ctgttcctct gctatccgtt tgggatgtac attccgttcc tgcarctgaa       300
ttkcgamcty cgsaagacaa gcctcttcaa ccacatggcc tccatggggc cccgggaggc       360
ggtcagtggc ctggcaaaga gccgggacta cctcctgaca ctgcgggaga cgtggaagca       420
gcacasaaga cagctgtatg gcccggacgc catgcccacc catgcctgct gcctgtcgcc       480
cagcctcatc cgcagtgagg tggagttcct caagatggac ttcaactggc gcatgaagga       540
agtgctcgts agctccatgc tgagcgccta ctatgtggcc tttgtgcctg tytggttcgt       600
gaagaacaca cattactatg acaagcgctg gtcctgctgna actcttcctg ctggtgtcca       660
tcagcacctc cgtgatcctc atgcagcacc tgctgctngc cagctactgt gacctgctgc       720
acaaggccgc cgcccatctg ggctgttggc agaaggtgga cccagcgctg tgctccaacg       780
tgctgcagca cccgtgggact gaagaatgca tgtggccgca gggcgtgctg gtgaagcaca      840
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acttccgctt ccakttcttt ttcagcaaac ccctgcggat cctcaacatc ctcctgctgc        960
tggagggcgc tgtcattgtc tatcagctgt actccctaat gtcctctgaa aagtggcacc      1020
agaccatctc gctggccctc atcctcttca gcaactacta tgccttcttc aagctgctcc      1080
gggaccgctt ggtattgggc aaggcctact catactctgc tagccccag agagacctgg      1140
accaccgttt ctcctgagcc ctggggtcac ctcagggaca gcgtccaggc ttcagcaagg      1200
gctccctggc aagggggctgt tgggtagaag tggtggtggg ggggacaaaa gacaaaaaaa      1260
tccaccagag ctttgtattt ttgttacgta ctgtttcttt gataattgat gtgataagga      1320
aaaaagtcct attttttatac tcccaanmaa aaaaaaaaaa naaaaagcgg ccgaaagct      1379


<210> 19
<211> 1337
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c


<400> 19
ctggtgttgg gcctgagccn cctcaacaac tcctacaact tcagtttcca cgtggtgatc        60
ggctctcagg cggaagaagg ccagtacagc ctgaacttcc acaactgcaa caattcagtg       120
ccaggaaagg agcatccatt cgacatcacg gtgatgatcc gggagaagaa ccccgatggc       180
ttcctgtcg cagcggagat gcccctttc aagtctaca tggtcatgtc cgcctgcttc         240
ctggccgctg gcatcttctg ggtgtccatc ctctgcagga acacgtacag cgtcttcaag      300
atccactggc tcatggcggc cttggccttc accaagagca tctctctcct cttccacagc      360
atcaactact acttcatcaa cagccagggg ccacCccatc gaaggccttg ccgkcatgta      420
ctacatcgca cacctgctga agggcgccct cctcttcatc accatcgccc tgattggctc      480
aggctgggct tcatcaagta cgtcctgtcg gataaggaga agaaggtcctt tgggatcgtg      540
atccccatgc aggtcctggc caacgtggcc tacatcatca tcgagtcccg cgaggaaggc      600
gccacgaact acgtgctgtg gaaggagatt ttgttcctgg tggacctcat ctgctgtggt      660
gccatcctgt tccccgtagt ctggtccatc cggcatctcc aggatgcgtc tggcacagac      720
gggaaggtgg cagtgaacct ggccaagctg aagctgttcc ggcattacta tgtcatggtc      780
```

```
atctgctacg tctacttcac ccgcatcatc gccatcctgc tgcaggtggc tgtgcccttt    840
cagtggcagt ggctgtacma gctcttggtg garggctcca ccctggcctt cttcgtgctc    900
acgggctaca agttccagcc cacagggaac aacccgtacc tgcagctgcc ccaggaggac    960
gaggaggatg ttcagatgga gcaagtaatg acggactctg ggttccggga aggcctctcc    1020
aaagtcaaca aaacagccag cgggcgggaa ctgttatgat cacctccaca tctcagacca    1080
aagggtcgtc ctcccccagc atttctcact cctgcccttc ttccacacg tatgtgggga    1140
ggtggagggg tccatgtgga ccaggcgccc agctcccggg acscccggttc ccggacaagc    1200
ccatttggaa gaagagtccc ttcctccccc caaatattgg gcagccctgt ccttacccg    1260
ggaccaccc tcccttccag ctatgtgtac aataatgacc aatctgtttg gctaaaaaaa    1320
aaaaaaaaa aactcga                                                    1337
```

```
<210> 20
<211> 1390
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1267)
<223> n equals a,t,g, or c

<400> 20
gccgttttgg ttcccggttg gtgcttcctg ttcgcagctg cggcacttca aggttactga     60
cttttttatga tgtttggtg ctatgagact atagawgcrt rsgrrgatga tytttatcga    120
gatgagtcat ctagtgaact gagtgttgat agtgaggtgg aatttcaact ctatagccaa    180
attcattatg cccaagatct tgatgatgtc atcagggagg aagagcatga agaaaagaac    240
tctgggaatt cggaatcttc gagtagtaaa ccaaatcaga agaagctaat cgtcctttca    300
gatagtgagg tcatccagct gtcagatggg tcagaggtca tcactttgtc tgatgaagac    360
agtatttata gatgtaaagg aaagaatgtt agagttcaag cacaagaaaa tgcccatggt    420
ctttcttctt ctcttcaatc taatgactgt gttgataaga aatgcaagag tgatattgag    480
aagcctaaat ctgaagagag atcaggtgta atccgagagg tcatgattat agaggtcagt    540
tcaagtgaag aggaagagag caccatttca gaaggtgata atgtggaaag ctggatgcta    600
ctgggatgtg aagtagatga taaagatgat gatatccttc tcaaccttgt gggatgtgaa    660
aactctgtta ctgaaggaga agatgtgtata aactggtcca tcagtgacaa agacattgag    720
gcccagatag ctaataaccg aacacctgga agatggaccc agcggtacta ttcagccaac    780
aaaaacatta tctgtagaaa ttgtgacaaa cgtggtcatt tatcaaaaaa ctgccctta    840
ccacgaaaag ttcgtcgctg cttcctgtgc tccaggagag gacatctcct gtattcctgt    900
ccagccccc tttgcgaata ctgtcctgtg cctaagatgt tggaccactc atgtcttttc    960
agacattcct gggataaaca gtgtgaccga tgtcatatgc taggccacta tacgatgct    1020
tgcacagaaa tctggaggca gtatcaccta acgaccaaac ctggaccacc caaaaagccg    1080
aagaccctt caagaccatc agccttagca tattgctatc actgcgcgca aaaaggccat    1140
tatggacacg aatgtccaga aagagaagtg tatgacccgt ctccagtatc tccattcatc    1200
tgctactatg rtgacaaata tgaaatttac gagagagaaa agagactaaa acaaaacatg    1260
aaagtgantca agaaaaatgg ggttatccca gagccatcca agctacctta tataaaagca    1320
gcaaatgaga acccccacca tgatataagg aaaggccgtg cctcatggaa aagcaacagg    1380
tggcctcaag                                                            1390
```

```
<210> 21
<211> 1431
<212> DNA
<213> Homo sapiens

<400> 21
gcctgcagtc gacactagtg gatccaaaga attcggcctg tgcgagtagg cgcttgggca     60
ctcagtctcc ctggcgagcg acgggcagaa atctcgaacc agtggagcgc actcgtaacc    120
tggatcccag aaggtcgcga aggcagtacc gtttcctcag cggcggactg ctgcagtaag    180
```

```
aatgtctttt ccacctcatt tgaatcgccc tcccatggga atcccagcac tcccaccagg    240
gatcccaccc ccgcagtttc caggatttcc tcacctgta cctccaggga ccccaatgat    300
tcctgtacca atgagcatta tggctcctgc tccaactgtc ttagtaccca ctgtgtctat    360
ggttggaaag catttgggcg caagaaagga tcatccaggc ttaaaggcta aagaaaatga    420
tgaaaattgt ggtcctacta ccactgtttt tgttggcaac atttccgaga aagcttcaga    480
catgcttata agacaactct tagctaaatg tggtttggtt ttgagctgga agagagtaca    540
aggtgcttcc ggaaagcttc aagccttcgg attctgtgag tacaaggagc cagaatctac    600
cctccgtgca ctcagattat tacatgacct gcaaattgga gagaaaaagc tactcgttaa    660
agttgatgca aagacaaagg cacagctgga tgaatggaaa gcaaagaaga aagcttctaa    720
tgggaatgca aggccagaaa ctgtcactaa tgacgatgaa gaagccttgg atgaagaaac    780
aaagaggaga gatcagatga ttaaaggggc tattgaagtt ttaattcgtg aatactccag    840
tgagctaaat gccccctcac aggaatctga ttctcacccc aggaagaaga agaaggaaaa    900
gaaggaggac attttccgca gatttccagt ggccccactg atcccttatc cactcatcac    960
taaggaggat ataaatgcta tagaaatgga agaagacaaa agagacctga tatctcgaga   1020
gatcagcaaa ttcagagaca cacataagaa actgaagaga gagaaaggca aaaaggaaaa   1080
agaaagacag gaaattgaga aagaacggag agaaagagag agggagccgtg aaagggaacg   1140
agaaagcga gaacgggaac ggagatagga aggagaacgt gaacgagaaa aggagaaaga   1200
acgggagcgg gaacgagaac gggatagga ccgtgaccgg acaaaagaga gagaccgaga   1260
tcgggatcga gagagaatc gtgacgggga tagagaaagg agctcagatc gtaataagga   1320
tcgcattcga tcaagagaaa aaagcagaga tcgtgaaagg gaacgagagc gagagagaga   1380
gagagagaga gaacgagagc gagaacgaga acgggagcga gagagagaag c            1431


<210> 22
<211> 2539
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1283)
<223> n equals a,t,g, or c

<400> 22
gggtgcagga gtgtgcacccc cagggccctg tcaacctctc ttttctcctc catggctgtc     60
tgcctgcgta tctgtctctg agaatcctcg gggcggtcag gggatgtcag gaggggaagg    120
agccgccctc cctatcttgc tgctcctctt ggcactcagg ggcaccttcc atggagccag    180
accgggtgga ggggcttctg ggatttggtg tctgctgctg ccagagcagg aaccccccagt    240
ctaggacttg ggcattttaa cagggagaaa gtagtggctt ccctttttctc tctctcctcc    300
tttttccctt taagcccaca gattcaggtc atgccaaaag ctctctggtt gtaacctgga    360
gacatgtgga ggggaatggc gatgggatta taggactctc cccatctcgg gccctgaccc    420
tgaccttgc caccaaccca aagacagctg gtgggttttcc ccttggagam aatcctgcgt    480
ttgcctgggc cggccctggc tgccctcagc tttcgctgat ctgcccggcc tggagcctcc    540
catcacccg cttcttgttg ggcctcaggc actggttacc agaaggggt ctgggtctgc    600
tcaggaatca tgtttgtag cacctcctgt tggagggggtg gagggatgtc ccctggccc    660
aggctgagac tagaacccca tcttccctga gccaggctga gactagaacc ccatcttccc    720
caccacgcca cccctgtgst kgctacagga gcacagtagt gaaggcctga gtccaggtt    780
tgaaagaccc aactggagcg tggggcgggc aggcaggggt tagtgaaagg acacttccag    840
ggttaggaca gagcatttta ccttctgaga gaacccctgc ctggggtggg actgtgcagg    900
ccagagaagg tggcatgggc ctgaacccac ctggactgac ttctgcactg aagccacaga    960
tggaggggtag gctggtgggt ggggtggtt cgttctctag ccggggcaga cacccagctg   1020
gctgggtcct tcctcagcct tgcctcctcc tgtccccaac ccttttcctt cctcctgctt   1080
gcggactgct ggtccctct ccttccctcc ttccagctgt ttctagttac cacctacccc   1140
tgggccgtgg actgatcaga ccagcattca aaataaaagt ttgttccaag ttgacagtgt   1200
ggtgctccct gcccagcccc tccaggtgga ggtgctgcca cgggaacgca gttgctctgc   1260
ctgccctggg cccctggccga cantgggagc agggcagtgc tgtgaggagc ccagctttcc   1320
cagtcaggca ggcatggctt ccgtgttcag gctccctcac cagctggtga cacgggacaa   1380
gcttacaaac cttctctgaa cctcagtttt ctcatttaca agaggcaaag catccatcac   1440
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```
cttgtgtgga ttcaragaat gtraggccct ggggtgtcct acacaaggga aaggcttgct    1500
cagtgagcgg tctgcacacc gttagccacc ctgccacctc tgtgccctgg gcaggctcca    1560
aaggaaagct ctggctggga ctgccrggag tctcacacgc tcctgttgac attcccagca    1620
gcygcccctg aggtcgatgt ttgttctgtt tttctttttc tttttgaga cggagtctcg     1680
ctgtgttgcc aggctggagt gcagtggtgt gatctctgct cactgcaacc tccgcctgcc    1740
agtttcaagt gattctctgc ctcagccttc tgagtagctg ggactacagg tgcacgccac    1800
cacgcccagc taacttttg tatttwagta gagacagggt ttcgccatgt cggccagggt     1860
ggtcttgatc tcctgacctc atgatccacc cgcctcagcc tcccaaagtg ctgggattac    1920
aggtatgagc caccgcaccg ggcctgttct atttttctag ttaagggaac tgaagctcag    1980
araggtgtca ccagcargtg ttcattccca tgccagcctt gcccccggc tttttcccagg     2040
caggctcctg cgtgcccact ggctccagcc tggtcctctg tctcttggct gcttcactcc    2100
tgctctttgt cccgactctg gccctgctta caggggccac taactgctgg tgcctccata    2160
acaagcgtct ggcgttgaga cccctggcat ggcagggct ttggggtctg gtttccacaa      2220
ggcttagcca tggcagaacc tcgttttatt ttaactcttt gccctacaa acaaacagca     2280
gtacttgcca gaaccattct tgggattcag gagctcgggc gactgccttg gcctctggcc    2340
gcacccagga gggtgggggtt ggatctgtgt agttgccagg cccacacctg ccagcagggg   2400
gctgactgga tccatgcttt actgtgttta atggggggtaa caggggtccc tacagccctc   2460
ccagytaaam atttggaaca aaacaccagc ccttttgtag tggatgcaga ataaaattgt     2520
taatccaatc aaaaaaaaaa                                                2539
```

<210> 23
<211> 1041
<212> DNA
<213> Homo sapiens

<400> 23

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tcgacccacg cgtccgccca cgcgtccgcc cacgcgtccg ggcgcaggac gtgcactatg    60
gctcggggct cgctgcgccg gttgctgcgg ctcctcgtgc tggggctctg gctggcgttg    120
ctgcgctccg tggccgggga gcaagcgcca ggcaccgccc cctgctcccg cggcagctcc    180
tggagcgcgg acctggacaa gtgcatggac tgcgcgtctt gcaggcgcg accgcacagc     240
gacttctgcc tgggctgcgc tgcagcacct cctgccccct tccggctgct ttggcccatc    300
cttgggggcg ctctgagcct gaccttcgtg ctggggctgc tttctggctt tttggtctgg    360
agacgatgcc gcagagagag aagttcacca cccccataga ggagaccggc ggagagggct    420
gcccagctgt ggcgctgatc cagtgacaat gtgcccctg ccagccgggg ctcgcccact     480
catcattcat tcatccattc tagagccagt ctctgcctcc cagacgcggc gggagcaagc    540
tcctccaacc acaaggggg tggggggcgg tgaatcacct cygaggcctg ggcccagggt     600
tcagggggaac ttccaaggtg tctggttgcc ctgcctctgg ctccagaaca gaaagggagc   660
ctcacgctgg ctcacacaaa acagctgaca ctgactaagg aactgcagca tttgcacagg   720
ggagggggggt gccctccttc ctagaggccc tgggggccag gctgacttg ggggcagact    780
tgacactagg ccccactcac tcagatgtcc tgaaattcca ccacgggggt caccctgggg   840
ggttagggac ctattttaa cactagggg ctggcccact aggagggctg gccctaagat     900
acagacccc ccaactcccc aaagcggga ggagatattt attttgggga gagtttggag      960
gggaggggga atttattaat aaaagaatct ttaactttaa aaaaaaaaaa aaaaagggc    1020
ggccgctcta gaggatccct c                                             1041
```

<210> 24
<211> 1962
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (452)
<223> n equals a,t,g, or c

<220>

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<221> SITE
<222> (480)
<223> n equals a,t,g, or c

<400> 24
acccacgcgt ccggtacaaa acacagtttt attctatgaa aattttgaga ttattagaaa        60
cattagattt agggttgcat attaaaaact atatccattt tgccttatta tttagtgtct       120
cactcaggat ataacacact ataatagaaa atgtagactt cagaatcagg tatatttgag       180
atggtttgta tactggttct gacacttgtt agctattcat ctttggtaaa ttccccatta       240
ccctttgtkc acctatwtgt ggggatcagt gcatagtgtg tgtwaagcat ttaatacctg       300
gcaagtgttc agcaaatttt ttgttctata tatttattat ttgattattg gccctgagga       360
gtaggtgttt gtttgtttgt ttgtttgttt agttttattt ctcatctcct caggaacaca       420
aatgaaactt ggatattgtt atggtgcttt tnataatata tttattattt tcagcaattn       480
attcttgtta aaacaatttc ttatgacaag ttactcatct tcaatggtga gaagaaatct       540
agctcagaat aatatatttt tagtgtttgt atctctggat actcattttg ctcattgcca       600
cgtaaagtaa aaaaatacat aaattagctt attccaatgt aatatcttca ggatagtcat       660
gggcaaggaa ttaatcacat taagagataa ctgcaactaa gcactatttg aggtgacttc       720
tgtggaaaaa aaattaatyc tttaccattg cagcgttctg ccctaggtcc aaatgttacc       780
aaaatcactc tagaatcttt tcttgcctgg aagaaaagga aaagacaaga aaagattgat       840
aaacttgaac aagatatgga aagaaggaaa gctgacttca aagcagggaa agcactagtg       900
atcagtggtc gtgaagtgtt tgaatttcgt cctgaactgg tcaatgatga tgatgaggaa       960
gcagatgata cccgctacac ccagggaaca ggtggtgatg aggttgatga ttcagtgagt      1020
gtaaatgaca tagatttaag cctgtacatc ccaagagatg tagatgaaac aggtattact      1080
gtagccagtc ttgaaagatt cagcacatat acttcagata aagatgaaaa caaattaagt      1140
gaagcttctg gaggtagggc tgaaaatggt gaaagaagtg acttggaaga ggacaacgag      1200
agggaggaa cggaaaatgg agccattgat gctgttcctg ttgatgaaaa tcttttcact      1260
ggagaggatt tggatgaact agaagaagaa ttaaatacac ttgatttaga agaatgacac      1320
caaacacatc gctgaaaaaa ttaagtcagc tcagcacgag ttgaaattga ctacattaat      1380
ttctttccac ctagaatcaa caggatgttt atttcctatg ctgattctgg aggagttaac      1440
ctcctgcaaa aaaggcatct tgtccctaca tcttctcttc tgactttggc tacatctcat      1500
agtaagttca gagtagttca tgataaattg aaaatataat ggtcattgca gaaaatgatt      1560
gatgttgtaa ctgtccaccc aagtaagaag tgtatctgcc tttccatctt ttggttttca      1620
tttgggcatg tgctattacc agaaacaaca aacttatatt taaaataccc ttcatttgac      1680
acagttttta atgagtgatt taatttcctc tgtatttgta tgtttagaag actgcctaaa      1740
acatgagcac tgtacttcat aaaggaaacg cgtatgcaga ttcagtattg tgtatctttg      1800
gacaattaga tggacatttta aaatgggaact tcttttatct gacaggatca gctacaatgc      1860
cctgtgttaa attgtttaaa agtttccctt ttcttttttg ccaataaagt tgtaaataaa      1920
gaccatcata cattaaaatc caaaaaaaaa aaaaaaaaaa aa                         1962


<210> 25
<211> 1228
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (580)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (621)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1159)
```

<223> n equals a,t,g, or c

<400> 25
```
ggctgcccag gccccgcact ggaagagcct ccagcagcaa gatgtgaccg ytgtgccgat         60
gagccccagc agccactccc cagaggggag gcctccacct ctgctgcctg ggggtccagt        120
gtgtaaggca gctgcatctg caccgagctc cctcctggac cagccgtgcc tctgccccgc        180
accctctgtc cgcaccgctg ttgccctgac aacgccggat atcacattgg ttctgccccc        240
tgacatcatc caacaggaag cgtcaccctg agggaggaga cagaagcctg ggccaggtga        300
acagtggtat agcagccact ccagcctctg ctgcagcagc caccctggat gtggctgttc        360
ggagaggcct gtcccacgga gcccagaggc tgctgtgcgt ggccctggga cagctggacc        420
ggcctccaga cctcgcccat gacgggagga gtctgtggct gaacatcagg ggcaaggagg        480
cggctgccct atccatgttc catgtctcca cgccactgcc agtgatgacc ggtggtttcc        540
tgagctgcat cttgggcttg gtgctgcccc tggcctatgn ttccagcctg acctggtgct        600
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ctagcaggga tcctggcccg ggtgctgaat ggagaggcac ctcctagcct aggcccttcc        780
tctgtggcct ccccagagga cgtccaggcc ctgatgtacc tgagagggca gctggagcct        840
cagtggaaga tgttgcagtg ccatcctcac ctggtggctt gaaatcggcc aaggtgggag        900
catttacacc gcagaaatga caccgcacgc cagcgccccg cggccgcgat ccggacccca        960
agcccacggc tccctcgact ctggggcacg gaaccccgcc cactcccaat ccccgcgccc       1020
cgccctctcc cacccgtgct tcccccgctc cacccctcac ctcacctcgc cccsgcccca       1080
cccatcgcgc cccggcccgt cccatcgagg cccatgcaac ccacgctcag tyccgtttcc       1140
gcccctgcgc tckcgctkns ttcgctcccc gcccttgcgc cgttagtgca catcgctcaa       1200
acgaaaaaaa aaaaaaaaaa aaactcga                                          1228
```

<210> 26
<211> 1340
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (847)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1303)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1307)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1314)
<223> n equals a,t,g, or c

<400> 26
```
aattcggcag agagatggcc gccccgtgg atctagagct gaagaaggcc ttcacagagc          60
ttcaagccaa agttattgac actcaacaga aggtgaagct cgcagacata cagattgaac       120
agctaaacag aacgaaaaag catgcacatc ttacagatac agagatcatg actttggtag       180
atgagactaa catgtatgaa ggtgtaggaa gaatgtttat tcttcagtcc aaggaagcaa       240
ttcacagtca gctgttagag aagcagaaaa tagcagaaga aaaaattaaa gaactagaac       300
agaaaagtc ctacctggag cgacgttaaa ggaagctgag gacaacatcc gggagatgct       360
```

```
gatggcacga aggggccagt agggagcctc tctgggaagc tcttcctcct gcccctccca      420
ttcctggttg gggcagagga gtgtctgcag ggaaacagct tctcctctgc ccgatggat      480
gctttatttg gatggcctgg caacatcaca ttttctgcat caccctgagc cccatttgct      540
tcccagccct ggagtttta cccggctttg ctgccacctc tgcccaggac ackcttccct      600
ctcgggatgt gtgatgaact cccaggagag ggaagatggg agccaggggca agataggaag      660
ctctgcctga gctttccact aggcacgcca gccagaccaa taaaaagcgt ctgtcccact      720
ctgctaagcc tggttttctt gagcagagga atggaacaga gggtgagaga ggcagtggcc      780
gtctccacct cagctcctgc tccctctgca tcagagccct tcctttcttg ggggatgggc      840
cttgccntct tctctttcc cttcctgtac ctttgactaa cgctcagctt ccgggcctgc      900
atgcagtaga cagaagagga agaaagaaca gatgttcaca gctgaatctc agtgaacaga      960
atagcagtcc ctggatggca gtctgcctaa agattccttt ccctgccttc tcccatacat     1020
tccaaaagga agttcaacag taagcagcac ctccaagcat gtctccttty ggccartatc     1080
ataagdatgga cgccataatc ctgaggcctc ctagaggctg aggggggcaac ggtgtgatcc     1140
agctggctca tcccagccag gtgggccaat tattcaattt tcaagaattt tgttgcaagc     1200
cagttgtcaa acacagccat tataattatg taaatttgca aattatgtta aaaacaagga     1260
caataaatat tcaaaatgca tccctaawwa aaaaaaaaaa aangggnggc cgcnctaggg     1320
gatccaagct tacgtacgcg                                                1340
```

```
<210> 27
<211> 806
<212> DNA
<213> Homo sapiens

<400> 27
accttcttcc atgtttagtc ccttgggctc tgctaccctc ctgctggagg tgagagcatc      60
ctgtgtgcaa ccagagatgc cctctggctt tcagacctgc ctgctttca ccctcagccc     120
tttctcactc agcaaaattg tgggggtccc tagtcagcag ctccctgggc agctctctga     180
gcaaggtggt ctctgtggtc atgaaggaga gccggctagg acagtgccgg aaactcagct     240
gcctctcccc ttcaactcag ctggcccccc gcacctgaag tgcacaggag ccgggaagag     300
agtctggagc ccaccccgga gggcagcaca gggaggtgtct ctgcagctgg tgtcctgcca     360
ccctgcgagg cagcacacgt cccgggcatt ctccttagcc acagacagaa cagccagtgc     420
cagagtctgc tgtctcgttccc ctttaagcac actcattcac cacacccgag gaggccagag     480
gtgcagggag catgggctgt cgcttcccct ttaagcacac tcattcacca caccgagga     540
ggccagaagt gcagggagca tgggctgggt gcacctccgc aggagagaag gctgagccac     600
cgccgtcccg ggagcccggc tcccaggcct ctcgttttcc cctacctccc taagacttt      660
ctgtcactct ctggccattg aaaggcttct gttccttaaa gtgctgttac actctccttt     720
cccaggatgc agcaagccaa aacagtacca ctgcacgtca gctgggtga cagagtgaga     780
ccctatctta aaaaaaaaa aaaaaa                                          806
```

```
<210> 28
<211> 696
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (21)
<223> n equals a,t,g, or c

<400> 28
gagttcccna cgcggtggcg nccgttttag aaattagtgg atccccccgg gctggcaggg      60
```

```
aattcggcac gagcacagag gaaagcgggt gcccggcatg gccatcctga tgttgctggc      120
gggatcccca tgcaccttgt ccttctccac tgatactggc agctcggctc ctggacccaa      180
gatcccttga gtggaattct gcagtgcaag agcccttcgt gggagctgtc ccatgtttcc      240
atggtcccca gtctcccctc cacttggtgg ggtcaccaac tactcaccag aagggggctt      300
accaagaaag ccctaaaaag ctgttgactt atctgcgctt gttccaactc ttatgccccc      360
aacctgccct accaccacca cgcgctcagc ctgatgtgtt tacatggtac tgtatgtatg      420
ggagagcaga ctgcaccctc cagcaacaac agatgaaagc cagtgagcct actaaccgtg      480
ccatcttgca aactacactt taaaaaaaac tcattgcttt gtattgtagt aaccaatatg      540
tgcagtatac gttgaatgta tatgaacata ctttcctatt tctgttcttt gaaaatgtca      600
gaaatatttt tttctttctc attttatgtt gaactaaaaa ggattaaaaa aaaaatctcc      660
agamaaaaaa aaaaaaaaaa aaattactgc ggtccg      696
```

<210> 29
<211> 1007
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (922)
<223> n equals a,t,g, or c

<400> 29
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aattcggcac gaggaaaaaa taccatttgt gtatgatacc caatttggat ctcaatttgg      60
atagagattt ggtgcttcca gatgtgtragtt atcaggtgga atccagtgag gaggatcagt      120
ctcagactat ggatcctcaa ggacaaactc tgctgctttt tctctttgtg gatttccaca      180
gtgcatttcc agtccagcaa atggaaatct ggggagtcta tactttgctc acaactcatc      240
tcaatgccat ccttgtggag agccacagtg tagtgcaagg ttccatccaa ttcactgtgg      300
acaaggtctt ggagcaacat caccaggctg ccaaggctca gcagaaacta caggcctcac      360
tctcagtggc tgtgaactcc atcatgagta ttctgactgg aagcactagg agcagcttcc      420
gaaagatgtg tctccagacc cttcaagcag ctgacacaca agagttcagg accaaactgc      480
acaaagtatt tcgtgagatc acccaacacc aatttcttca ccactgctca tgtgaggtga      540
agcagctaac cctagaaaaa aaggactcag cccagggcac tgaggacgca cctgataaca      600
gcagcctgga gctcctagca gatcccagcg ggcaagcaga aaacaagagg ctcaagaggg      660
gcagcccccg catagaggag atgcgagctc tgcgctctgc cagggcccg agcccgtcag      720
aggccgaccc gcgccgcccg gaagccaccg cggccccctt cactcctaga ggaagggagc      780
accgcgaggc tcacggcagg gccctggcgc cgggcagggc gagcctcgga agccgcctgg      840
aggacgtgct gtggctgcag gaggtctcca acctgtcaga gtggctgagt cccagccctg      900
ggcctgagc cgggtccct tncgcaagcg cccaccgatc cggargctgc gggcagccgt      960
tatcccgtgg tttaataaag tgccgcgcgc tcaccaaaaa aaaaaaa      1007
```

<210> 30
<211> 2026
<212> DNA
<213> Homo sapiens

<400> 30
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gaattcggca cgagcacgga tccgttgcgg ctgcagctct gcagtcgggc cgttccttcg      60
ccgccgccag gggtagcggt gtagctgcgc agcgtcgcgc gcgctaccgc acccaggttc      120
ggcccgtagg cgtctggcag cccggcgcca tcttcatcga gcgccatggc cgcagccgc      180
gggccgggag cggccgggta ctgcttgctc ctcggccttgg atttgtttct gctgaccgcg      240
ggcctgccc tgggctggaa cgaccctgac agaatgttgc tgcggggatgt aaaagctctt      300
accctccact atgaccgcta taccacctcc cgcaggctgg atcccatccc acagttgaaa      360
tgtgttggag gcacagctgg ttgtgattct tataccccaa aagtcataca gtgtcagaac      420
aaaggctggg atgggtatga tgtacagtgg gaatgtaaga cggacttaga tattgcatac      480
aaatttggaa aaactgtggt gagctgtgaa ggctatgagt cctctgaaga ccagtatgta      540
```

```
ctaagaggtt cttgtggctt ggagtataat ttagattata cagaacttgg cctgcagaaa      600
ctgaaggagt ctggaaagca gcacggcttt gcctctttct ctgattatta ttataagtgg      660
tcctcggcgg attcctgtaa catgagtgga ttgattacca tcgtggtact ccttgggatc      720
gcctttgtag tctataagct gttcctgagt gacgggcagt attctcctcc accgtactct      780
gagtatcctc cattttccca ccgttaccag agattcacca actcagcagg acctcctccc      840
ccaggcttta agtctgagtt cacaggacca cagaatactg gccatggtgc aacttctggt      900
tttggcagtg cttttacagg acaacaagga tatgaaaatt caggaccagg gttctggaca      960
ggcttgggaa ctggtggaat actaggatat ttgtttggca gcaatagagc ggcaacaccc     1020
ttctcagact cgtggtacta cccgtcctat cctccctcct accctggcac gtggaatagg     1080
gcttactcac cccttcatgg aggctcgggc agctattcgg tatgttcaaa ctcagacacg     1140
aaaaccagaa ctgcatcagg atatggtggt accaggagac gataaagtag aaagttggag     1200
tcaaacactg gatgcagaaa ttttggattt ttcatcactt tctctttaga aaaaaagtac     1260
tacctgttaa caattgggaa aaggggatat tcaaaagttc tgtggtgtta tgtccagtgt     1320
agcttttgt attctattat ttgaggctaa aagttgatgt gtgacaaaat acttatgtgt     1380
tgtatgtcag tgtaacatgc agatgtatat tgcagttttt gaaagtgatc attactgtgg     1440
aatgctaaaa atacattaat ttctaaaacc tgtgatgccc taagaagcat taagaatgaa     1500
ggtgttgtac taatagaaac taagtacaga aaatttcagt tttaggtggt tgtagctgat     1560
gagttattac ctcatagaga ctataatatt ctatttggta ttatattatt tgatgtttgc     1620
tgttcttcaa acatttaaat caagctttag actaattatg ctaatttgtg agttctgatc     1680
acttttgagc tctgaagctt tgaatcattc agtggtggag atggccttct ggtaactgaa     1740
tattaccttc tgtaggaaaa ggtggaaaat aagcatctag aaggttgttg tgaatgactc     1800
tgtgctggca aaaatgcttg aaacctctat atttctttcg ttcataagag gtaaaggtca     1860
aattttcaa caaaagtctt ttaataacaa aagcatgcag ttctctgtga aatctcaaat     1920
attgttgtaa tagtctgttt caatcttaaa aagaatcaat aaaaacaaac aaggggaaaa     1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa actcga                    2026
```

```
<210> 31
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (44)
<223> n equals a,t,g, or c

<400> 31
gngtttttc cagccaggaa gtgaccgnta ctgcagcacg aganagattg gttgggttgg       60
ttgraaatga cyctgaacat ttatttccat tgcaatttct gtggctgagg agacttaaac     120
tttacaagta ttatcctttt aagatcattt taattttagt tgagtgcaga gggctttat     180
aacaaacgtg cagaaatttt ggagggctgt gattttttcca gtattaaaca tgcatgcatt     240
aatcttgcag tttatttct cattgtgtat gtatatatcg cttttctctg cagcacgatt     300
tctcttttga taawkccctt tagggcacaa ctagttatca gtaactgaat gtatcttaat     360
cattatggct gcttctgttt tttcattaac aaaggttatt catatgttag catatagttt     420
ctttgcaccc actatttatg tctgaatcat ttgtcacaag agagtgtgtg ctgatgagat     480
tgtaagtttg tgtgtttaaa cttttttttg agcgagggaa gaaaaagctg tatgcatttc     540
attgctgtct acaggtttct ttcagattat gttcatgggt ttgtgtgtat acaatatgaa     600
```

```
gaatgatctg aagtaattgt gctgtattta tgtttattca ccagtctttg attaaataaa    660
aaggaaaacc agaaaaaaaa aaaaaaaaaa aaaaaaaaa                            699
```

```
<210> 32
<211> 1264
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1057)
<223> n equals a,t,g, or c

<400> 32
ggcacgaggg cactgtttcc tcagtccatg gctgagtaca tcaccggtgt tttctctctt     60
attcctccca tcaagcctaa aaggaatctc tattggagat actgccatta gtgttccttt    120
tataggtgag gaactgaggc atakagggtt ccccagttga accaactgat aaatagtaga    180
acttggattt taattcagtc ttgatgccag ggataaggct cttactttct accttaggct    240
atttctagga aacgcaggag agtgttgaag gggcagagaa agggatccag ttcctttctg    300
tcccgcatcc tagtccctga gaagcaaaga araatgtgtg gcttcttttg ctttgctttt    360
gttgtcatcc cacacatctc caggggamct gggctcttga tcttggsctc ttccccttta    420
actgttaagt gggagcargt aaggggggtac agtaggtgctg gcctggagtt agaggcttgg   480
atgccttagc tcctctgtct gcactccaga actgcctgac ttcatttcgt atgttgtcct    540
ttgtttgac aattgatcca tgtcccagtc cgtctcttct tccttcttga tacttacact    600
gcttcttct gttggtttcc agtgtttaac actgtataca acagtgacga caacgtgttt     660
gtggggccc ccacgggcag cgggaagact atttgtgcag agtttgccat cctgcgaatg    720
ctgctgcaga gctcggaggg gcgctgtgys twcwtcaccm ccatggaggc cctggccaga    780
rcaggtatga cgtggcgctg tgtcatgtga atttcccaag aagcatttca tctgtgattc    840
cgtatgaagg ctttctaagc cctgaaattt gcagggtcat ttcctcagtt tgtgtattaa    900
agaaaagctg ccccagccaa gcgtggtggc tcacgcctgt aatcccagca ctttgggagg    960
ccgaggcggg cagatctccg gagatcagga gttcgagacc agcctggcca acatggtgra   1020
accctgtctc tactaaaawt acagaaatta gctgggngtg gtggtgtgcg cctgtaatcc   1080
cagctactg gaaggctgag gcagggaat cgcttgaacc cgggaggcgg aggttgcagt    1140
gagccaagtt cgcaccactg cactccagcc tgggcaacaa gagcgagact tcatctcaaa   1200
aaaaaaaaa aaaaactcga ggggggggccc ggtacccaat tcgccctata gtgatcgtat   1260
taca                                                                1264
```

```
<210> 33
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (855)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (881)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (916)
<223> n equals a,t,g, or c
```

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<220>
<221> SITE
<222> (957)
<223> n equals a,t,g, or c

<400> 33
attggaagtt gttttgcaac ctgggctttt atacagaaga atacgaatca caggtgtgtg      60
agcatctact taattaattt gcttacagcc gatttcctgc ttactctggc attaccagtg     120
aaaattgttg ttgacttggg tgtggcacct tggaagctga agatattcca ctgccaagta     180
acagcctgcc tcatctatat caatatgtat ttatcaatta tcttcttagc atttgtcagc     240
attgaccgct gtcttcagct gacacacagc tgcaagatct accgaataca agaacccgga     300
tttgccaaaa tgatatcaac cgttgtgtgg ctaatggtcc ttcttataat ggtgccaaat     360
atgatgattc ccatcaaaga catcaaggaa aagtcaaatg tgggttgtat ggagtttaaa     420
aaggaatttg gaagaaattg gcatttgctg acaaatttca tatgtgtagc aatattttta     480
aatttctcag ccatcatttt aatatccaat tgccttgtaa ttcgacagct ctacagaaac     540
aaagataatg aaaattaccc aaatgtgaaa aaggctctca tcaacatact tttagtgacc     600
acgggctaca tcatatgctt tgttccttac cacattgtcc gaatcccgta taccctcagc     660
cagacagaag tcataactga ttgctcaacc aggatttcac tcttcaaagc caaagaggct     720
acactgctcc tggctgtgtc gaacctgtgc tttgatccta tcctgtacta tcacctctca     780
aaagcattcc gctcaaaggt cactgagact tttgcctcmc ctaaagagac caaggtyaga     840
aagaaaaatt aagangtgga aataatggct aaaagacagg nttttgtggg taccaattct     900
gggctttatg ggaccntaaa gttattatag cttggaaggt aaaaaaaaa aaagggnggg     960
cgctctagag gttccccgag gggccagctt agggtgc                             997


<210> 34
<211> 1914
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1889)
<223> n equals a,t,g, or c

<400> 34
gtgtgagagg cctctctgga agttgtcccg ggtgttcgcc gctggagccc gggtcgagag      60
gacgaggtgc cgctgcctgg agaatcctcc gctgccgtcg gctcccggag gtctgcctgc     120
tcctaaccca acccaaccta gcccagtccc agccgccagc gcctgtccct gtcacggacc     180
ccagcgttac catgcatcct gccgtcttcc tatccttacc cgacctcaga tgctcccttc     240
tgctcctggt aacttgggtt tttactcctg taacaactga aataacaagt cttgatacag     300
agaatatага tgaaattita aacaatgctg atgttgcttt agtaaatttt tatgctgact     360
ggtgtcgttt cagtcagatg ttgcatccaa tttttgagga agcttccgat gtcattaagg     420
aagaatttcc aaatgaaaat caagtagtgt ttgccagagt tgattgtgat cagcactctg     480
acatagccca gagatacagg ataagcaaat acccaaccct caaattgttt cgtaatgggа     540
tgatgatgaa gagagaatac aggggtcagc gatcagtgaa agcattggca gattacatca     600
ggcaacaaaa aagtgacccc attcaagaaa ttcgggactt agcagaaatc accactcttg     660
atcgcagcaa aagaaaatc attggatatt ttgagcaaaa ggactcggac aactatagag     720
tttttgaacg agtagcgaat attttgcatg atgactgtgc ctttcttct gcatttgggg     780
atgtttcaaa accggaaaga tatagtggcg acaacataat ctacaaacca ccagggcatt     840
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ttcaagataa atgtgttcct cttgtccgag aaataacatt tgaaatgga gaggaattga     960
cagaagaagg actgcctttt ctcatactct ttcacatgaa agaagataca gaagttggac    1020
aaatattcca gaatgaagta caagccaaat taataagtgaa aaaagtaca ataaacttt      1080
tacatgccga ttgtgacaaa tttagacatc ctcttctgca catacagaaa actccagcag    1140
attgtcctgt aatcgctatt gacagcttta ggcatatgta tgtgtttgga gacttcaaag    1200
atgtattaat tcctggaaaa ctcaagcaat tcgtatttga cttacattct ggaaaactgc    1260
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acagagaatt ccatcatgga cctgacccaa ctgatacagc cccaggagag caagcccaag      1320
atgtagcaag cagtccacct gagagctcct tccagaaact agcacccagt gaatataggt      1380
atactctatt gagggatcga gatgagcttt aaaaacttga aaaacagttt gtaagccttt      1440
caacagcagc atcaacctac gtggtggaaa tagtaaacct atattttcat aattctatgt      1500
gtatttttat tttgaataaa cagaaagaaa ttttggggttt ttaatttttt tctccccgac      1560
tcaaaatgca ttgtcattta atatagtagc ctcttaaaaa aaaaaaaaac ctgctaggat      1620
ttaaaaataa aaatcagagg cctatctcca ctttaaatct ttgcctgtaaa agttttataa      1680
atcaaatgaa aggtgacatt gccagaaact taccattaac ttgcactact agggtaggga      1740
ggacttaggg atgtttcctg tgtcgtatgt gcttttcttt ctttcatatg atcaattctg      1800
ttggtatttt cagtatctca tttctcaaag ctaaagagat atacattctg gatacttggg      1860
aggggaataa attaaagttt tcacactgna aaaaaaaaaa aaaaaaaac tcga            1914
```

```
<210> 35
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1014)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1015)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1018)
<223> n equals a,t,g, or c


<400> 35
gtataattat aaatttgntc ggttcnaccg gtcctgtgtt gcytaaaaac accttataaa        60
agaggagagt atttgataag caatttttcat agtagtaaag tttttttttca tctcttaaac      120
taaattgacc atgcatataa tattctttgt ttaaatgaaa gcatactgtt gaaacccgca       180
gtgttgcatt tagaaaacag ttgaacagaa tgtcaatgtg cattcatgca aaaaaacatt       240
taatctgcat ctgttttaga aaagggggaa atgaagcaac ttgtctaaaa atactgcttt       300
acaaagcatt tcagcctttc cccctcagtt ttgcattgat tttttgacaa gtctgtagag       360
cctaatagtt tccatcaaag gcctagatct cttatttagc atttttttca gctcttctct       420
cagaagttca gctgttgaaa cgaaaactgt actttgtacc ctcacataca aagggatcaa       480
atttgacctg gtgttatttt agcccaaat ttatgacatt acacaatatt aaaatgtaaa        540
tgtttcttta cccaaactac ttctagatat tctagtattt gcttctggtg gaattaaatg       600
acggtaaaat tggctaatta tttgaatgaa tgaatggatg gatgtttttgc atgctcaatt      660
tctaggtcct ttgtctagaa aggaaatttg cctcagttga attagtgaaa tattctgtc        720
gttgatatta aaagtgactt ctgagtacag ttaagttcct cctatttgcc actgggctgt       780
tggttagaag cataggtaac tgattaagta ggtatgatac tgcatttgaa ataagtggac       840
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acaaactatc ctttctccac catggactca atctgagaac aacagcattc atttccattc          900
atttccatac tggcttttga ttatatgcag attcctagta gcatgcctta cctacagcac          960
tatgtgcatt tgctgtcaca ataaagtata ttttgtcttg caaaaaaaaa aaannaangg         1020


<210> 36
<211> 781
<212> DNA
<213> Homo sapiens

<400> 36
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ragccactgc gcctggctga tcccagcact tttmaaatga tgccgctcaa agccgtgact          120
tggcctactt tgaacagcaa acttgttgct gctgttgtca acctgaaggc ctctcaaatg          180
ccagcttcaa gcagggtgtg aattggccag tgtcagatct caggagtcct gtgttgagag          240
tgtggctttc agctgcgggg agctgcactt ggtgggggaaa gccaggcagg tcaccctcac          300
agccagataa tgtggaggtc agaacccaag gaagggagtg agacctccac tcccagtggg          360
ggacctggcc accatcctt ggggacctga gaaagcgtac ttcaccttgg ggtgaaggct          420
gggtggggcc agagggacca gtgccctcct cagtgcttag gggcagagcc acctgcagca          480
atggtatctg catattagcc cctctccacc ttctttctct cgctgaatca tttccctcaa          540
agcccaagag ctgtcactgc ttctttctcc ctgggaagaa tgcgtggact ctgcctggtg          600
atagactgaa gccagaacag tgccacaccc tcgccttaat tccttgctag gtgttctcag          660
atttatgaga cttcttagtc aaatatgagg gaggttggat gtggtggctt gtgcctgtaa          720
tcccagcatt ttgggaagcc gaggtgggag gatcccttga agccaggagt ttgagacaag          780
c                                                                         781


<210> 37
<211> 966
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (586)
<223> n equals a,t,g, or c

<400> 37
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aatcccagc ttcccatgca ggctggggac atagtgggtt ctcccgaaat actgggtcac          120
ttgaatttga tatgatgtat atatattcac ctctagtcca taggtacata tagtctatat          180
attaaaaaga cattggattt tgacttaaac tagatgtttc tcaagcacac caagacggtg          240
ctagagcctg ggtttggcca gagaattggg tcccggtcag aagtgagtgg ggatggctgg          300
cgagcaaggt gtctgtaggg cagcacagga tgtctggtga gcagacagca agcttctgtc          360
ctgccccgag tgctgaggag cgaggtgact gcctacatgg tgatgtgaaag atttgggcac          420
gcttccggct ttcaggccaa acaacctcgc ttgctccatg gcaccactga tcccagcagt          480
ggcccgaggg agctccttcc tgctgcttca tgctctgaca ctttgggggg ctcctttccc          540
caccacgtgg gtctcctgtc agcctcgaag tgtcctgcgc ccctcncctg tacgcccagg          600
tgtgcctccc ctggccgcac ytcctctgtg ctcctgcgtc tctctgttct tctttagagt          660
ggttctgcac gtcagcagca tctgtggtgt gggcctggga cccttcagaa caggggctcc          720
tgcccagctt ctgggtcccc cacctgtggc ccagggaagg ctctttgttc ctcagcccca          780
agctgtatct ggtgagaaca gatgcgtagt cccgagctc aagttctggg aagggcagtg          840
ccctttttctg tggggcctg ggcttgttct gcattgtttc aagaggagct gccactcaaa          900
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taggcagccc tgcaatcgga gggctgcgtg ctccccctga tcagccccca gctgcttcct      960
cgtgcc                                                                  966
```

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<210> 38
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (395)
<223> n equals a,t,g, or c

<400> 38
gaattcggca cgaggtaata ggagccctcg tacctcttgt gttccttaca aacattctca      60
tcagtagctc tacgcgttga ctgggtggtt tgaratggct ggtatacaca gggctttctt     120
ggtgttctgt ctctggggct tarctttgtg tgtggttgga gggccctggt gagattggaa     180
gtaccagaga gtgctgtgtc aggggcagag gggcctgtcg ctggagctgg agggtgcctg     240
cctttgtgtc tgactccartc tcctgtctgc cttgcccct caggggtctcg ccagcccagc     300
ctctgtggga atctaaaagg artggatgtg gacgtktgac caagcacatc tcagctttta     360
atacctgggc tatttataga cctttggggg gaatngcttg tggaacaaca agggtt         416
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<210> 39
<211> 1114
<212> DNA
<213> Homo sapiens

<400> 39
tgtgtatttg gggggactga agggtacgtg gggcgaaaca aaaccggcca tggcagcagc      60
ggaggaggag gacgggggcc ccgaagccaa aatcgcgagc ggggcggggc gggcgcgacc     120
ttcgaatgta atatatgttt ggagactgct cgggaagctg tggtcagtgt gtgtggccac     180
ctgtactgtt ggccatgtct tcatcagtgg ctggagacac ggccagaacg gcaagagtgt     240
ccagtatgta aagctgggat cagcagagag aaggttgtcc cgctttatcg gcgagggagc     300
cagaagcccc aggatcccag attaaaaact ccaccccgcc cccagggcca gagaccagct     360
ccggagagca gaggggggatt ccagccattt ggtgataccg ggggcttcca cttctcattt     420
ggtgttggtg cttttccctt tggctttttc accaccgtct tcaatgccca tgagcctttc     480
cgccgggggta caggtgtgga tctgggacag ggtcacccag cctccagctg gcaggattcc     540
ctcttcctgt ttctcgccat cttcttcttt ttttggctgc tcagtatttg agctatgtct     600
gcttcctgcc cacctccagc cagagaagaa tcagtattga gggtccctgc tgaccctcc      660
gtactcctgg acccccttga cccctctatt tctgttggct aaggccagcc ctggacattg     720
tccaggaagg cctgggggagg aggagtgaag tctgtgcata gatgggagag ccttctgctc     780
agaggctcac tcagtaacgt tgtttaattc tctgccctgg ggaaggagga tggattgaga     840
gaatgtcttt ctcctctcct aagtctttgc tttccctgat ttcttgattt gatcttcaaa     900
ggtgggcaaa gttccctctg actcttcccc cactcccat cttactgatt taatttaatt     960
tttcactccc cagagtctaa tatggattct gactcttaag tgcttccgcc ccctcactac    1020
ctccttaat acaaattcaa taaaaaaggt gaaatataaa aaaaaaaaa aaaaaacycg      1080
gggggggccc cggtcccat tcccttggg gggt                                  1114
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<210> 40
<211> 602
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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<222> (597)
<223> n equals a,t,g, or c

<400> 40
gggtcgaccc acgcgtccgt cccaggccac aagacatttc ctgctcggaa ccttgtttac       60
taattgtctc tgtggcacat tttgtttccc gtgccttggg tgtcaagttg cagctgatat      120
gaatgaatgc tgtctgtgtg gaacaagcgt cgcaatgagg actctctaca ggacccgata      180
tggcatccct ggatctattt gtgatgacta tatggcaact ctttgctgtc ctcattgtac      240
tctttgccaa atcaagagag atatcaacag aaggagagcc atgcgtactt tctaaaaact      300
gatggtgaaa agctcttacc gaagcaacaa aattcagcag acacctcttc agcttgagtt      360
cttcaccatc ttttgcaact gaaatatgat ggatatgctt aagtacaact gatggcatga      420
aaaaaatcaa attttgatt tattataaat gaatgttgtc cctgaactta gctaaatggt      480
gcaacttagt ttctccttgc tttcatatta tcgaatttcc tggcttataa acttttaaa      540
ttacatttga aatataaacc aaatgaaata ttttactgaa aaaaaaaaa aaaaaanccc      600
ca                                                                  602


<210> 41
<211> 970
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<400> 41
ggcagagctt aggagaacag ctcccttttgg atccctntca aaggtgatac cattggctcc       60
cagcttagag taagaagctc tgagaagttg aatgaagggt gagatagaga tgctgaaccc      120
attcttscag cttcttctag tgttgttatt tccagaatgg ccaacacccc tacattgata      180
cataaacaca ttccaaggcc ttgtgtaata caaagttcac cgtcctcctg gaataggagc      240
cctgggttct agttctcact ctgccactgg gggaaaatcc aattaaagtc tggtttagtc      300
agcttgggtc accatagact gggtggctta aacagcagac atttatttct ggtagtttct      360
ggaggctaca aatctaagag caaggtgcca gcatggtcac attctggtga gggscctctt      420
cctggcttgt agacggctgc yttctcaccg tgtgctcaca tagcctttcg tgtgtgtgtg      480
tgtgtgtgtg tgcgtkcgtg caagcttcck gatgtctctt cttagaagga caccaacccc      540
atcatgagag ccctactctc atgacttagc ctaacctaa ttaccctcca aaggcccat      600
ctccaaatgc catcacattg gagggtagag cttcaacata gggattttgg gggacacaaa      660
cattcagtcc ataacaaagg ctgtagtcct tartttcctt gtctgtgaaa tgagagtgtt      720
gagattcttt ctagcctttta tcatttataa ttctgtgaga tgtagatttg cattattttc      780
gagttcgagt tatatgaaat gtttccctct acattttctt gggcaactga gaactgaata      840
gggctaggtt taaatagagt taggcagtta ggcttattct tttatttaat aagcattttt      900
ggagcatcta cggtgttcca ggaactgaac tgttgtaaac attggagctg taacagagaa      960
caaaagagac                                                          970


<210> 42
<211> 1002
<212> DNA
<213> Homo sapiens

<400> 42
gaattcggca cgagccgagg tcggcagcac agagctctgg agatgaagac cctgttcctg       60
ggtgtcacgc tcggmctggc cgctgccctg tccttmaccc tggrggagga ggatatcaca      120
gggacctggt acgtgaaggc catggtggtc gataagactt ccatggagaca ggaggcccag      180
aaggtgtccc cagtgaaggt gacagccctg ggcggtggga agttggaagc cacgttcacc      240
ttcatgaggg aggatcggtg catccagaag aaaatcctgr tgcggaagac ggaggagcct      300
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ggcaaataca gcgcctgtga gccccteccc caytcccacc cccaccytcc cccaccgcca        360
accccagtgc accagcctcc acaggtagag agtgcccagg ctgcccttt gccagggccc        420
cagctctgcc cacctccaag gagggctgg cctctccttc ctgggggct ggtggccctg         480
acatcagaca ccgggtgtga caggcttgtc cgcagtcgag atggaccaga tcacgcctgc        540
cctctgggag gccctagcca ttgacacatt gaggaagctg aggattggga caaggaggcc        600
aaggattaga tggggcagg aagctcatgt acctgcagga gctgcccagg agggaccayt        660
acatctttta ctgcaaagac cagcaccatg ggggcstgct ccacatggga aagcttgtgg       720
gtaggaattc tgataccaac cggggaggcc ctggaagaatt taagaaattg gtgcagcgca      780
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actaggcagc cccgggtct gcacctccag agcccaccct accaccagac acagagcccg       900
gaccacctgg acctaccctc cagccatgac ccttccctgc tcccacccac ctgactccaa       960
ataaagtcct tctcccccaa aaaaaaaaaa aaaaaactc ga                          1002
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tgcaaaacca ctggacactg gacaagtacg ggatcctggs cgacgcacgc ctcttcttg         60
ggccccagca ccggsccgtc atccttcggt tgtccaaccg ccgcgcactg cgcctccgtg        120
ccagcttctc ccagcccctc ttccaggctg tggstgccat ctgccgcctc ctcagcatcc        180
ggcaccccga ggagctgtcc ctgctccgag ctcctgagaa gaaggagaag aagaagaaag        240
agaaggagcc agaggaagag ctctatgact tgagcaaggt tgtcttggct ggggcgtgg        300
cacctgcact gttccggggg atgccagctc acttctcgga cagcgcccag actgaggcct        360
gctaccacat gccgacgggc ccccagccgc caccgaccc cctcctgctc cagcgtctgc        420
cacggcccag ctccctgtca gacaagaccc agctccacag caggtggctg gactcgtcgc        480
ggtgtctcat gcagcagggc atcaaggccg gggacgcact ctggctgcgc ttcaagtact        540
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aggcccggtg ggacctgctg ctggaggaga ttgactgcac cgaggaggag atgatggtgt        660
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tggtgttcaa ggagaccaca ctgtcctact acaagagcca ggacgaggcc cctgggggacc      960
ccattcagca gctcaacctc aagggctgtg aggtggttcc cgatgttaac gtctccggcc       1020
agaagttctg cattaaaactc ctagtgccct ccctgaggc atgagtgaga tctacctgcg       1080
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cctgcagcgc acgggcagtg gggggcccggg caaccaccc cacggccctg atgcctctgc       1260
cgagggcctc aaccccctacg gcctcgttgc ccccgtttc cagcgaaagt tcaaggccaa        1320
gcagctcacc ccacggatcc tggaagccca ccagaatgtg gcccagttgt cgctggcaga      1380
ggcccagctg cgcttcatcc aggctggca gtccctgccc gacttcggca tctcctatgt        1440
catggtcagg ttcaaggca gcaggaaaga cgagatcctg ggcatcgcca acaaccgact       1500
gatccgcatc gacttggccg tgggcgacgt ggtcaagacc tggccgtttca gcaacatgcg      1560
ccagtggaat gtcaactggg acatccggca·ngtggccatc gagtttgatg aacacatcaa       1620
tgtgtggcttc agctgcgtgt ctgccagctg ccgaattgta cacgagtata tcggggcta      1680
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cattttcctg tcgacgcggg agngggcccg tggggaggag ctggatgaag   acctcttcct    1740
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ctccttgaag tacttgggaa ggaggaagcc atcagtattc cctggagtca   gaatcacccc    2460
attggcagag cggaagaagg gtattccatc tgctgacaga gccagagatg   tgactcatgc    2520
cctccccgaa ggcaaagtca gctcctgctt tgtccagact cacctgccag   agccaggggt    2580
c                                                                      2581


<210> 44
<211> 796
<212> DNA
<213> Homo sapiens

<400> 44
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 ctgtgtgcaa ccagagatgc cctctggctt tcagacctgc ctgcttttca   ccctcagccc     120
 tttctcactc agcaaaattg tgggggtccc tagtcagcag ctccctgggc   agctctctga     180
 gcaaggtggt ctctgtggtc atgaaggaga gccggctagg acagtgccgg   aaactcagct     240
 gcctctcccc ttcaactcag ctggccccc  gcacctgaag tgcacaggag   ccgggaagag     300
 agtctggagc ccaccccgga gggcagcaca ggaggtgtct ytgcagctgg   tgtcctgcma     360
 cccytgcagg cagmacacgt cccgggcatt ytcyttagcc acagacagaa   cagccagtgc     420
 cagagtctgc tgtcgyttcc cctttaagca cactcattca ccacacccga   gggaggccaga    480
 ggtgcaggga gcatgggctg tcgttccct  ttaagcacac tcattcacca   cacccgagga     540
 ggccagaagt gcagggagca tgggctgggt gcacctccgc aggagagaag   gctgagccac     600
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 ctgtcactct ctggccattg aaaggcttct gttccttaaa gtgctgttac   actctccttt     720
 cccaggatgc agcaagccaa aacagtacca ctgcacgtca gcctgggtga   cagagtgaga     780
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<210> 45
<211> 2017
<212> DNA
<213> Homo sapiens

<400> 45
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 cgtagcgtct ggcagcccgg cgccatcttc atcgagcgcc atggccgcag   cctgcgggcc     180
 gggagcggcg ggtactgctt gctcctcggc ttgcatttgt ttctgctgac   cgcgggccct     240
 gcctgggctg gaacgaccct gacagaatgt tgctgcggga tgtaaaagct   cttaccctcc     300
 actatgaccg ctataccacc tcccgcagct ggatcccatc ccacagttga   aatgtgttgg     360
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 aaaaactgtg gtgagctgtg aaggctatga gtcctctgaa gaccagtatg   tactaagagg     540
 ttcttgtggc ttggagtata atttagatta tacagaactt ggctgcagaa   actgaagga     600
 gtctggaaag cagcacggct ttgcctcttt ctctgattat tattataagt   ggtcctcggc     660
 ggattcctgt aacatgagtg gattgattac catcgtggta ctccttggga   tcgcctttgt     720
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agtctataag ctgttcctga gtgacgggca gtattctcct ccaccgtact ctgagtatcc        780
tccattttcc caccgttacc agagattcac caactcagca ggacctcctc ccccaggctt        840
taagtctgag ttcacaggac cacagaatac tggccatggt gcaacttctg gtgttggcag        900
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agtgtaacat gcagatgtat attgcagttt ttgaaagtga tcattactgt ggaatgctaa       1440
aaatacatta atttctaaaa cctgtgatgc cctaagaagc attaagaatg aaggtgttgt       1500
actaatagaa actaagtaca gaaaatttca gttttaggtg gttgtagctg atgagttatt       1560
acctcataga gactataata ttctatttgg tattatatta tttgatgttt gctgttcttc       1620
aaacatttaa atcaagcttt ggactaatta tgctaatttg tgagttctga tcacttttga       1680
gctctgaagc tttgaatcat tcagtggtgg agatggcctt ctggtaactg aatattacct       1740
tctgtaggaa aaggtggaa ataagtcatct agaaggttgt tgtgaatgac tctgtgctgg       1800
caaaaatgct tgaaacctct atatttcttt cgttcataag aggtaaaggt caaattttc        1860
aacaaaagtc ttttaataac aaaagcatgc agttctctgt gaaatctcaa atattgttgt       1920
aatagtctgt ttcaatctta aaaagaatca ataaaaacaa acaagggaaa aaaaaaaaa       1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                               2017


<210> 46
<211> 981
<212> DNA
<213> Homo sapiens

<400> 46
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 atggtggtcg ataagacttt ccggagacag gaggcccaga aggtgtcccc agtgaaggtg        180
 acagccctgg gcggtgggaa gttggaagcc acgttcacct tcatgaggga ggatcggtgc        240
 atccagaaga aaatcctgrt gcggaagacg aggagccctg gcaaatacag cgcctgtgag        300
 cccctccccc aytcccaccc ccaccytccc ccaccgccaa ccccagtgca ccagcctcca        360
 caggtagaga gtgcccaggc tgcccttttg ccagggcccc agctctgccc acctccaagg        420
 agggctggc ctctccttcc tgggggggctg gtggccctga catcagacac cgggtgtgac        480
 aggcttgtcc gcagtcgaga tggaccagat cacgcctgcc ctctgggagg ccctagccat        540
 tgacacattg aggaagctga ggattgggac aaggaggcca aggattagat ggggcagga        600
 agctcatgta cctgcaggag ctgcccagga gggaccayta catctttac tgcaaagacc        660
 agcaccatgg gggcstgctc cacatgggaa agcttgtggg taggaattct gataccaacc        720
 gggaggccct ggaagaattt aagaaattgg tgcagcgcaa gggactctcg gaggaggaca        780
 ttttcacgcc cctgcagacg ggaagctgcr ttcccgaaca ctaggcagcc cccgggtctg        840
 cacctccaga gcccaccta ccaccagaca cagacccggg accacctgga cctaccctcc        900
 agccatgacc cttccctgct cccacccacc tgactccaaa taaagtcctt ctcccccaaa        960
 aaaaaaaaaa aaaaaactcg a                                                 981


<210> 47
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation
```

```
<400> 47
Met His Tyr Gln Met Ser Val Thr Leu Lys Tyr Glu Ile Lys Lys Leu
  1               5                  10                  15

Ile Tyr Val His Leu Val Ile Trp Leu Leu Leu Val Ala Lys Met Ser
             20                  25                  30

Val Gly His Leu Arg Leu Leu Ser His Asp Gln Val Ala Met Pro Tyr
         35                  40                  45

Gln Trp Glu Tyr Pro Tyr Leu Leu Ser Ile Leu Pro Ser Leu Leu Gly
     50                  55                  60

Leu Leu Ser Phe Pro Arg Asn Asn Ile Ser Tyr Leu Val Leu Ser Met
 65                  70                  75                  80

Ile Ser Met Gly Leu Phe Ser Ile Ala Pro Leu Ile Tyr Gly Ser Met
                 85                  90                  95

Glu Met Phe Pro Ala Ala Gln Pro Ser Thr Ala Met Ala Arg Pro Thr
             100                 105                 110

Val Ser Ser Leu Val Phe Leu Pro Phe Pro Ser Cys Thr Trp Cys Trp
             115                 120                 125

Cys Trp Gln Cys Lys Cys Met Pro Gly Ser Cys Thr Thr Ala Arg Ser
     130                 135                 140

Ser Xaa
145


<210> 48
<211> 312
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (312)
<223> Xaa equals stop translation

<400> 48
Met Asn Ser Val Val Ser Leu Leu Leu Ile Leu Glu Pro Asp Lys Gln
  1               5                  10                  15

Glu Ala Leu Ile Glu Ser Leu Cys Glu Lys Leu Val Lys Phe Arg Glu
             20                  25                  30

Gly Glu Arg Pro Ser Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His
         35                  40                  45

Gly Met Asp Lys Asn Thr Pro Val Arg Tyr Thr Val Tyr Cys Ser Leu
     50                  55                  60

Ile Lys Val Ala Ala Ser Cys Gly Ala Ile Gln Tyr Ile Pro Thr Glu
 65                  70                  75                  80
```

```
Leu Asp Gln Val Arg Lys Trp Ile Ser Asp Trp Asn Leu Thr Thr Glu
                    85                  90                  95

Lys Lys His Thr Leu Leu Arg Leu Leu Tyr Glu Ala Leu Val Asp Cys
            100                 105                 110

Lys Lys Ser Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser
            115                 120                 125

Tyr Thr Glu Asp Asn Ala Ser Gln Ala Arg Val Asp Ala His Arg Cys
            130                 135                 140

Ile Val Arg Ala Leu Lys Asp Pro Asn Ala Phe Leu Phe Asp His Leu
145                 150                 155                 160

Leu Thr Leu Lys Pro Val Lys Phe Leu Glu Gly Glu Leu Ile His Asp
                    165                 170                 175

Leu Leu Thr Ile Phe Val Ser Ala Lys Leu Ala Ser Tyr Val Lys Phe
                    180                 185                 190

Tyr Gln Asn Asn Lys Asp Phe Ile Asp Ser Leu Gly Leu Leu His Glu
            195                 200                 205

Gln Asn Met Ala Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val
            210                 215                 220

Glu Asn Lys Glu Ile Ser Phe Asp Thr Met Gln Gln Glu Leu Gln Ile
225                 230                 235                 240

Gly Ala Asp Asp Val Glu Ala Phe Val Ile Asp Ala Val Arg Thr Lys
                    245                 250                 255

Met Val Tyr Cys Lys Ile Asp Gln Thr Gln Arg Lys Val Val Val Ser
            260                 265                 270

His Ser Thr His Arg Thr Phe Gly Lys Gln Gln Trp Gln Gln Leu Tyr
            275                 280                 285

Asp Thr Leu Asn Ala Trp Lys Gln Asn Leu Asn Lys Val Lys Asn Ser
            290                 295                 300

Leu Leu Ser Leu Ser Asp Thr Xaa
305                 310
```

```
<210> 49
<211> 64
<212> PRT
<213> Homo sapiens

<400> 49
Met Met Ser Phe Phe Cys Phe Val Met Gly Val Thr Val Ala Ala Thr
 1               5                   10                  15

Phe Thr Ala Ile Val Pro Arg Trp Arg Leu Ser Gln Lys Glu Ile Gly
            20                  25                  30
```

```
Ser Val Leu Ser Val Trp Leu Ser Arg Trp Arg Glu Asn Ser Leu Arg
         35                  40                  45

Ser Leu Val Ser Gln Ser Val Ala Arg Ser Gly Lys Val Val Ile Arg
     50                  55                  60
```

<210> 50
<211> 467
<212> PRT
<213> Homo sapiens

<400> 50
```
Met Leu Ser Arg Pro Gln Pro Pro Asp Pro Leu Leu Leu Gln Arg
  1               5                  10                  15

Leu Pro Arg Pro Ser Ser Leu Ser Asp Lys Thr Gln Leu His Ser Arg
         20                  25                  30

Trp Leu Asp Ser Ser Arg Cys Leu Met Gln Gln Gly Ile Lys Ala Gly
         35                  40                  45

Asp Ala Leu Trp Leu Arg Phe Lys Tyr Tyr Ser Phe Phe Asp Leu Asp
     50                  55                  60

Pro Lys Thr Asp Pro Val Arg Leu Thr Gln Leu Tyr Glu Gln Ala Arg
 65                  70                  75                  80

Trp Asp Leu Leu Leu Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met
                 85                  90                  95

Val Phe Ala Ala Leu Gln Tyr His Ile Asn Lys Leu Ser Gln Ser Gly
         100                 105                 110

Glu Val Gly Glu Pro Ala Gly Thr Asp Pro Gly Leu Asp Gln Leu Asp
         115                 120                 125

Val Ala Leu Ser Asn Leu Glu Val Lys Leu Glu Gly Ser Ala Pro Thr
     130                 135                 140

Asp Val Leu Asp Ser Leu Thr Thr Ile Pro Glu Leu Lys Asp His Leu
145                 150                 155                 160

Arg Ile Phe Arg Pro Arg Lys Leu Thr Leu Lys Gly Tyr Arg Gln His
                 165                 170                 175

Trp Val Val Phe Lys Glu Thr Thr Leu Ser Tyr Tyr Lys Ser Gln Asp
         180                 185                 190

Glu Ala Pro Gly Asp Pro Ile Gln Gln Leu Asn Leu Lys Gly Cys Glu
         195                 200                 205

Val Val Pro Asp Val Asn Val Ser Gly Gln Lys Phe Cys Ile Lys Leu
     210                 215                 220
```

```
Leu Val Pro Ser Pro Glu Gly Met Ser Glu Ile Tyr Leu Arg Cys Gln
225                 230                 235                     240

Asp Glu Gln Gln Tyr Ala Arg Trp Met Ala Gly Cys Arg Leu Ala Ser
                245                 250                 255

Lys Gly Arg Thr Met Ala Asp Ser Ser Tyr Thr Ser Glu Val Gln Ala
            260                 265                 270

Ile Leu Ala Phe Leu Ser Leu Gln Arg Thr Gly Ser Gly Gly Pro Gly
            275                 280                 285

Asn His Pro His Gly Pro Asp Ala Ser Ala Glu Gly Leu Asn Pro Tyr
            290                 295                 300

Gly Leu Val Ala Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu
305                 310                 315                     320

Thr Pro Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu
                325                 330                 335

Ala Glu Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp
                340                 345                 350

Phe Gly Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp
            355                 360                 365

Glu Ile Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala
            370                 375                 380

Val Gly Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp
385                 390                 395                     400

Asn Val Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His
                405                 410                 415

Ile Asn Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His
            420                 425                 430

Glu Tyr Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg
            435                 440                 445

Gly Glu Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His
            450                 455                 460

Glu Ala Phe
465
```

```
<210> 51
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
```

<223> Xaa equals stop translation

<400> 51
Met Arg Pro Gly Arg Gly Ala Gly Thr Pro Gly Arg Pro Gly Arg Gly
1   5   10   15

Arg Gly Leu Ala Ala Thr Cys Ser Leu Ser Ser Pro Ser His Leu Leu
            20   25   30

Pro Thr Leu Leu His Thr Phe Ser Phe Ser Leu Pro Pro Pro Ser Pro
            35   40   45

Ala Ala Pro Arg Gln Pro Ser Pro Pro Ala Leu Leu Leu Pro Gly Pro
        50   55   60

Gln Lys Pro Arg Pro Gly Asp Pro Thr Tyr Thr Gly Ala Leu Thr Asp
65   70   75   80

Trp Ser Xaa

<210> 52
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals stop translation

<400> 52
Met Phe Leu Val Phe Phe Leu Ser Phe Phe Ser His Ser Ile Ser Ala
1   5   10   15

Leu Thr Leu Val Cys Ser Gln Gly Gly Lys Ala Asp Met Asn Leu Leu
            20   25   30

Ser Trp Asp Phe Arg Pro His Trp Leu Glu Gly Ile Arg Phe Leu Leu
            35   40   45

Gly Trp Gly Gln Ala Leu Met Ala Gly Leu Phe Pro Trp Leu Xaa
        50   55   60

<210> 53
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

```
<222> (124)
<223> Xaa equals stop translation

<400> 53
Met Arg Gly Ser Trp His Arg Ser Pro Leu Pro Ala Val Val Leu Pro
  1               5                  10                  15

Ser Val Leu Gln Thr Ala Leu Ser Pro Leu Ala Leu Cys Gln Ala Trp
               20                  25                  30

Arg Arg Ala Val Pro His Gly Val Pro Ser Gln Arg Leu Arg Asn Gln
           35                  40                  45

Glu Ala Ser Leu Val Pro Lys Gly Val Pro Arg Ala Trp Tyr Pro Gly
       50                  55                  60

Pro Leu Gln Asn Gly Leu Trp Thr His Leu Glu Lys Gly Glu Leu Leu
 65                  70                  75                  80

Gly Leu Lys Pro Thr Pro Gly Gly Leu Leu Leu Leu Arg Ser Phe Trp
                85                  90                  95

Asp Pro His Pro Ser Arg Pro Phe Leu Cys Thr Leu Leu Pro Pro Pro
               100                 105                 110

Leu Xaa Ile Phe Pro Pro Leu Arg Cys Ser Ala Xaa
        115                 120


<210> 54
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals stop translation

<400> 54
Met Thr Ser Ala Gly Pro Val Xaa Leu Phe Leu Leu Val Ser Ile Ser
 1               5                  10                  15

Thr Ser Val Ile Leu Met Gln His Leu Leu Xaa Ala Ser Tyr Cys Asp
                20                  25                  30

Leu Leu His Lys Ala Ala Ala His Leu Gly Cys Trp Gln Lys Val Asp
            35                  40                  45

Pro Ala Leu Cys Ser Asn Val Leu Gln His Pro Trp Thr Glu Glu Cys
        50                  55                  60

Met Trp Pro Gln Gly Val Leu Val Lys His Ser Lys Asn Val Tyr Lys
 65                  70                  75                  80

Ala Val Gly Xaa Xaa Xaa Val Ala Ile Pro Ser Asp Val Ser His Phe
                85                  90                  95

Arg Phe Xaa Phe Phe Phe Ser Lys Pro Leu Arg Ile Leu Asn Ile Leu
            100                 105                 110

Leu Leu Leu Glu Gly Ala Val Ile Val Tyr Gln Leu Tyr Ser Leu Met
        115                 120                 125

Ser Ser Glu Lys Trp His Gln Thr Ile Ser Leu Ala Leu Ile Leu Phe
        130                 135                 140

Ser Asn Tyr Tyr Ala Phe Phe Lys Leu Leu Arg Asp Arg Leu Val Leu
145                 150                 155                 160

Gly Lys Ala Tyr Ser Tyr Ser Ala Ser Pro Gln Arg Asp Leu Asp His
                165                 170                 175

Arg Phe Ser Xaa
            180


<210> 55
<211> 287
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (287)
<223> Xaa equals stop translation

<400> 55
Met Pro Leu Phe Lys Leu Tyr Met Val Met Ser Ala Cys Phe Leu Ala
 1               5                   10                  15

Ala Gly Ile Phe Trp Val Ser Ile Leu Cys Arg Asn Thr Tyr Ser Val
                20                  25                  30

Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys Ser Ile
            35                  40                  45

Ser Leu Leu Phe His Ser Ile Asn Tyr Tyr Phe Ile Asn Ser Gln Gly
        50                  55                  60

Pro Pro His Arg Arg Pro Cys Arg His Val Leu His Arg Thr Pro Ala
 65                 70                  75                  80

Glu Gly Arg Pro Pro Leu His His His Arg Pro Asp Trp Leu Arg Leu
                85                  90                  95

Gly Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe Gly
            100                 105                 110

Ile Val Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile Ile
            115                 120                 125

Glu Ser Arg Glu Glu Gly Ala Thr Asn Tyr Val Leu Trp Lys Glu Ile
        130                 135                 140

Leu Phe Leu Val Asp Leu Ile Cys Cys Gly Ala Ile Leu Phe Pro Val
145                 150                 155                 160

Val Trp Ser Ile Arg His Leu Gln Asp Ala Ser Gly Thr Asp Gly Lys
                165                 170                 175

Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg His Tyr Tyr Val
                180                 185                 190

Met Val Ile Cys Tyr Val Tyr Phe Thr Arg Ile Ile Ala Ile Leu Leu
            195                 200                 205

Gln Val Ala Val Pro Phe Gln Trp Gln Trp Leu Tyr Xaa Leu Leu Val
        210                 215                 220

Glu Gly Ser Thr Leu Ala Phe Phe Val Leu Thr Gly Tyr Lys Phe Gln
225                 230                 235                 240

Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu Glu
                245                 250                 255

Asp Val Gln Met Glu Gln Val Met Thr Asp Ser Gly Phe Arg Glu Gly
            260                 265                 270
```

Leu Ser Lys Val Asn Lys Thr Ala Ser Gly Arg Glu Leu Leu Xaa
        275   280   285

<210> 56
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals stop translation

<400> 56
Met Pro Met Val Phe Leu Leu Leu Phe Asn Leu Met Ser Trp Leu Ile
1   5   10   15

Arg Asn Ala Arg Val Ile Leu Arg Ser Leu Asn Leu Lys Arg Asp Gln
            20   25   30

Val Xaa

<210> 57
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals stop translation

<400> 57
Met Lys Ile Val Val Leu Leu Pro Leu Phe Leu Leu Ala Thr Phe Pro
1   5   10   15

Arg Lys Leu Gln Thr Cys Leu Xaa
            20

<210> 58
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation

<400> 58
Met Ser Gly Gly Glu Gly Ala Ala Leu Pro Ile Leu Leu Leu Leu Leu
1   5   10   15

Ala Leu Arg Gly Thr Phe His Gly Ala Arg Pro Gly Gly Gly Ala Ser

```
                20                      25                        30

Gly Ile Trp Cys Leu Leu Leu Pro Glu Gln Glu Pro Pro Val Xaa
            35                      40                    45



<210> 59
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals stop translation

<400> 59
Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly
1                 5                   10                      15

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly
            20                      25                      30

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys
            35                      40                  45

Cys Met Asp Cys Ala Ser Cys Arg Ala Arg Pro His Ser Asp Phe Cys
        50                  55                  60

Leu Gly Cys Ala Ala Ala Pro Pro Ala Pro Phe Arg Leu Leu Trp Pro
 65                     70                      75                  80

Ile Leu Gly Gly Ala Leu Ser Leu Thr Phe Val Leu Gly Leu Leu Ser
                85                      90                      95

Gly Phe Leu Val Trp Arg Arg Cys Arg Arg Glu Arg Ser Ser Pro Pro
            100                     105                     110

Pro Xaa



<210> 60
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals stop translation

<400> 60
```

```
Met Val Cys Ile Leu Val Leu Thr Leu Val Ser Tyr Ser Ser Leu Val
  1                   5                  10                  15

Asn Ser Pro Leu Pro Phe Val His Leu Xaa Val Gly Ile Ser Ala Xaa
             20                  25                  30
```

```
<210> 61
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals stop translation

<400> 61
Met Thr Gly Gly Phe Leu Ser Cys Ile Leu Gly Leu Val Leu Pro Leu
  1                   5                  10                  15

Ala Tyr Xaa Ser Ser Leu Thr Trp Cys Trp Trp Arg Trp Gly Leu Pro
             20                  25                  30

Xaa Pro Ala Gly Pro Pro Arg Cys Thr Pro Gly Cys Asn Ala Ser Gly
         35                  40                  45

Ala Gly Arg Gly Pro Ser Pro Gly Pro Pro Gly Gly Glu Leu His Thr
     50                  55                  60

Pro Ala Ser Arg Asp Pro Gly Pro Gly Ala Glu Trp Arg Gly Thr Ser
 65                  70                  75                  80

Xaa
```

```
<210> 62
<211> 104
<212> PRT
<213> Homo sapiens

<400> 62
Met Ala Ala Pro Val Asp Leu Glu Leu Lys Lys Ala Phe Thr Glu Leu
  1                   5                  10                  15
```

```
Gln Ala Lys Val Ile Asp Thr Gln Gln Lys Val Lys Leu Ala Asp Ile
            20                  25                  30

Gln Ile Glu Gln Leu Asn Arg Thr Lys Lys His Ala His Leu Thr Asp
        35                  40                  45

Thr Glu Ile Met Thr Leu Val Asp Glu Thr Asn Met Tyr Glu Gly Val
    50                  55                  60

Gly Arg Met Phe Ile Leu Gln Ser Lys Glu Ala Ile His Ser Gln Leu
65                  70                  75                  80

Leu Glu Lys Gln Lys Ile Ala Glu Glu Lys Ile Lys Glu Leu Glu Gln
            85                  90                  95

Lys Lys Ser Tyr Leu Glu Arg Arg
            100
```

<210> 63
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation

<400> 63
```
Met Pro Ser Gly Phe Gln Thr Cys Leu Leu Phe Thr Leu Ser Pro Phe
 1               5                   10                  15

Ser Leu Ser Lys Ile Val Gly Val Pro Ser Gln Gln Leu Pro Gly Gln
            20                  25                  30

Leu Ser Glu Gln Gly Gly Leu Cys Gly His Glu Gly Glu Pro Ala Arg
        35                  40                  45

Thr Val Pro Glu Thr Gln Leu Pro Leu Pro Phe Asn Ser Ala Gly Pro
    50                  55                  60

Pro His Leu Lys Cys Thr Gly Ala Gly Lys Arg Val Trp Ser Pro Pro
65                  70                  75                  80

Arg Arg Ala Ala Gln Glu Val Ser Leu Gln Leu Val Ser Cys His Pro
            85                  90                  95

Cys Arg Gln His Thr Ser Arg Ala Phe Ser Leu Ala Thr Asp Arg Thr
            100                 105                 110

Ala Ser Ala Arg Val Cys Cys Arg Ser Pro Leu Ser Thr Leu Ile His
        115                 120                 125

His Thr Arg Gly Gly Gln Arg Cys Arg Glu His Gly Leu Ser Leu Pro
    130                 135                 140
```

```
Leu Xaa
145


<210> 64
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals stop translation

<400> 64
Met Ala Ile Leu Met Leu Leu Ala Gly Ser Pro Cys Thr Leu Ser Phe
 1               5                   10                  15

Ser Thr Asp Thr Gly Ser Ser Ala Pro Gly Pro Lys Ile Pro Xaa
            20                  25                  30


<210> 65
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (260)
<223> Xaa equals stop translation

<400> 65
Met Asp Pro Gln Gly Gln Thr Leu Leu Leu Phe Leu Phe Val Asp Phe
 1               5                   10                  15

His Ser Ala Phe Pro Val Gln Gln Met Glu Ile Trp Gly Val Tyr Thr
            20                  25                  30

Leu Leu Thr Thr His Leu Asn Ala Ile Leu Val Glu Ser His Ser Val
        35                  40                  45

Val Gln Gly Ser Ile Gln Phe Thr Val Asp Lys Val Leu Glu Gln His
    50                  55                  60

His Gln Ala Ala Lys Ala Gln Gln Lys Leu Gln Ala Ser Leu Ser Val
65                  70                  75                  80

Ala Val Asn Ser Ile Met Ser Ile Leu Thr Gly Ser Thr Arg Ser Ser
                85                  90                  95

Phe Arg Lys Met Cys Leu Gln Thr Leu Gln Ala Ala Asp Thr Gln Glu
            100                 105                 110

Phe Arg Thr Lys Leu His Lys Val Phe Arg Glu Ile Thr Gln His Gln
        115                 120                 125

Phe Leu His His Cys Ser Cys Glu Val Lys Gln Leu Thr Leu Glu Lys
```

```
            130                    135                    140
Lys Asp Ser Ala Gln Gly Thr Glu Asp Ala Pro Asp Asn Ser Ser Leu
145                    150                    155                    160

Glu Leu Leu Ala Asp Thr Ser Gly Gln Ala Glu Asn Lys Arg Leu Lys
                   165                    170                    175

Arg Gly Ser Pro Arg Ile Glu Glu Met Arg Ala Leu Arg Ser Ala Arg
                180                    185                    190

Ala Pro Ser Pro Ser Glu Ala Ala Pro Arg Arg Pro Glu Ala Thr Ala
           195                    200                    205

Ala Pro Leu Thr Pro Arg Gly Arg Glu His Arg Glu Ala His Gly Arg
        210                    215                    220

Ala Leu Ala Pro Gly Arg Ala Ser Leu Gly Ser Arg Leu Glu Asp Val
225                    230                    235                    240

Leu Trp Leu Gln Glu Val Ser Asn Leu Ser Glu Trp Leu Ser Pro Ser
                   245                    250                    255

Pro Gly Pro Xaa
              260
```

```
<210> 66
<211> 339
<212> PRT
<213> Homo sapiens

<400> 66
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu
  1                5                   10                   15

Gly Leu His Leu Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn
                 20                   25                   30

Asp Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His
            35                   40                   45

Tyr Asp Arg Tyr Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu
        50                   55                   60

Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val
65                   70                   75                   80

Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu
                 85                   90                   95

Cys Lys Thr Asp Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val
            100                  105                  110

Ser Cys Glu Gly Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly
        115                  120                  125

Ser Cys Gly Leu Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln
```

```
          130                    135                    140

Lys Leu Lys Glu Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp
145                    150                    155                    160

Tyr Tyr Tyr Lys Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu
                   165                    170                    175

Ile Thr Ile Val Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu
               180                    185                    190

Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro
           195                    200                    205

Pro Phe Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro
       210                    215                    220

Pro Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His
225                    230                    235                    240

Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr
                   245                    250                    255

Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile
               260                    265                    270

Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp
           275                    280                    285

Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp Asn
       290                    295                    300

Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val Cys
305                    310                    315                    320

Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly Thr
                   325                    330                    335

Arg Arg Arg
```

<210> 67
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals stop translation

<400> 67
```
Met His Ala Leu Ile Leu Gln Phe Ile Phe Ser Leu Cys Met Tyr Ile
  1               5                    10                    15

Ser Leu Phe Ser Ala Ala Arg Phe Leu Phe Xaa
               20                    25
```

```
<210> 68
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 68
Met Ser Gln Ser Val Ser Ser Ser Phe Leu Ile Leu Thr Leu Leu Leu
 1               5                  10                  15

Ser Val Gly Phe Gln Cys Leu Thr Leu Tyr Thr Thr Val Thr Thr Thr
            20                  25                  30

Cys Leu Trp Gly Pro Pro Arg Ala Ala Gly Arg Leu Phe Val Gln Ser
        35                  40                  45

Leu Pro Ser Cys Glu Cys Cys Cys Arg Ala Arg Arg Gly Ala Val Xaa
    50                  55                  60

Xaa Ser Pro Pro Trp Arg Pro Trp Pro Glu Gln Val
65                  70                  75


<210> 69
<211> 216
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (216)
<223> Xaa equals stop translation

<400> 69
Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys
 1               5                  10                  15

Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro Gly
            20                  25                  30

Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu Ile
        35                  40                  45

Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys Ser
    50                  55                  60

Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp His
```

```
  65                    70                      75                    80
Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser Ala
                 85                      90                      95
Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg Asn
               100                     105                   110
Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn Ile
           115                     120                   125
Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His Ile
       130                     135                   140
Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp Cys
145                     150                     155                   160
Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu Leu
               165                     170                   175
Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu Ser
               180                     185                   190
Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys Glu
           195                     200                   205
Thr Lys Val Arg Lys Lys Asn Xaa
       210                     215


<210> 70
<211> 407
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (407)
<223> Xaa equals stop translation

<400> 70
Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu
  1                 5                     10                    15
Leu Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr
               20                      25                    30
Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val
           35                      40                    45
Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu
       50                      55                    60
His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro
65                      70                      75                    80
Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser
               85                      90                    95
```

```
Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu
            100                 105                 110

Phe Arg Asn Gly Met Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser
            115                 120                 125

Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile
        130                 135                 140

Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys
145                 150                 155                 160

Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg
                165                 170                 175

Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu
            180                 185                 190

Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn
        195                 200                 205

Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu
        210                 215                 220

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys
225                 230                 235                 240

Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu
                245                 250                 255

Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp
            260                 265                 270

Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile
        275                 280                 285

Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe
    290                 295                 300

Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val
305                 310                 315                 320

Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys
                325                 330                 335

Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His
            340                 345                 350

Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp
        355                 360                 365

Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu
    370                 375                 380

Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu
385                 390                 395                 400
```

```
Arg Asp Arg Asp Glu Leu Xaa
                405
```

```
<210> 71
<211> 45
<212> PRT
<213> Homo sapiens

<400> 71
Met Ser Met Cys Ile His Ala Lys Lys His Leu Ile Cys Ile Cys Phe
1               5                   10                  15

Arg Lys Gly Gly Asn Glu Ala Thr Cys Leu Lys Ile Leu Leu Tyr Lys
            20                  25                  30

Ala Phe Gln Pro Phe Pro Leu Ser Phe Ala Leu Ile Phe
        35                  40                  45
```

```
<210> 72
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals stop translation

<400> 72
Met Pro Leu Lys Ala Val Thr Trp Pro Thr Leu Asn Ser Lys Leu Val
1               5                   10                  15

Ala Ala Val Val Asn Leu Lys Ala Ser Gln Met Pro Ala Ser Ser Arg
            20                  25                  30

Val Xaa
```

```
<210> 73
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 73
Met Ala Pro Leu Ile Pro Ala Val Ala Arg Gly Ser Ser Phe Leu Leu
1               5                   10                  15

Leu His Ala Leu Thr Leu Trp Gly Ala Pro Phe Pro Thr Thr Trp Val
            20                  25                  30
```

```
Ser Cys Gln Pro Arg Ser Val Leu Arg Pro Ser Pro Val Arg Pro Gly
         35                  40                  45

Val Pro Pro Leu Ala Ala Xaa Pro Leu Cys Ser Cys Val Ser Leu Phe
     50                  55                  60

Phe Phe Arg Val Val Leu His Val Ser Ser Ile Cys Gly Val Ala Leu
 65                  70                  75                  80

Gly Pro Phe Arg Thr Gly Ala Pro Ala Gln Leu Leu Gly Pro Pro Pro
                 85                  90                  95

Val Ala Gln Gly Arg Leu Phe Val Pro Gln Pro Gln Ala Val Ser Gly
             100                 105                 110

Glu Asn Arg Cys Val Val Pro Glu Leu Lys Phe Trp Glu Gly Gln Cys
         115                 120                 125

Pro Phe Leu Trp Gly Pro Gly Leu Val Leu His Cys Phe Lys Arg Ser
     130                 135                 140

Cys His Ser Asn Arg Gln Pro Cys Asn Arg Arg Ala Ala Cys Ser Pro
145                 150                 155                 160
```

```
<210> 74
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals stop translation

<400> 74
Met Ala Gly Ile His Arg Ala Phe Leu Val Phe Cys Leu Trp Gly Leu
  1               5                  10                  15

Xaa Leu Cys Val Val Gly Gly Pro Trp Xaa
             20                  25


<210> 75
<211> 91
<212> PRT
<213> Homo sapiens

<400> 75
Met Ala Ala Ala Glu Glu Glu Asp Gly Gly Pro Glu Ala Lys Ile Ala
```

```
 1                 5                    10                         15
```

Ser Gly Ala Gly Arg Ala Arg Pro Ser Asn Val Ile Tyr Val Trp Arg
```
                20                   25                     30
```

Leu Leu Gly Lys Leu Trp Ser Val Cys Val Ala Thr Cys Thr Val Gly
```
        35                   40                     45
```

His Val Phe Ile Ser Gly Trp Arg His Gly Gln Asn Gly Lys Ser Val
```
    50                   55                   60
```

Gln Tyr Val Lys Leu Gly Ser Ala Glu Arg Arg Leu Ser Arg Phe Met
```
65                   70                     75                     80
```

Gly Glu Gly Ala Arg Ser Pro Arg Ile Pro Asp
```
                85                   90
```


<210> 76
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals stop translation

<400> 76
Met Thr Ile Trp Gln Leu Phe Ala Val Leu Ile Val Leu Phe Ala Lys
```
 1                 5                    10                         15
```

Ser Arg Glu Ile Ser Thr Glu Gly Glu Pro Cys Val Leu Ser Lys Asn
```
                20                   25                     30
```

Xaa

<210> 77
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals stop translation

<400> 77
Met Leu Asn Pro Phe Xaa Gln Leu Leu Leu Val Leu Leu Phe Pro Glu
```
 1                 5                    10                         15
```

```
Trp Pro Thr Pro Leu His Xaa
                20


<210> 78
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 78
Met Lys Thr Leu Phe Leu Gly Val Thr Leu Gly Leu Ala Ala Ala Leu
 1               5                   10                  15

Ser Xaa Thr Leu Xaa Glu Glu Asp Ile Thr Gly Thr Trp Tyr Val Lys
                20                  25                  30

Ala Met Val Val Asp Lys Thr Phe Arg Arg Gln Glu Ala Gln Lys Val
            35                  40                  45

Ser Pro Val Lys Val Thr Ala Leu Gly Gly Gly Lys Leu Glu Ala Thr
        50                  55                  60

Phe Thr Phe Met Arg Glu Asp Arg Cys Ile Gln Lys Lys Ile Leu Xaa
 65                  70                  75                  80

Arg Lys Thr Glu Glu Pro Gly Lys Tyr Ser Ala Cys Glu Pro Leu Pro
                85                  90                  95

His Ser His Pro His Xaa Pro Pro Pro Thr Pro Val His Gln Pro
            100                 105                 110

Pro Gln Val Glu Ser Ala Gln Ala Ala Leu Leu Pro Gly Pro Gln Leu
        115                 120                 125

Cys Pro Pro Pro Arg Arg Gly Trp Pro Leu Leu Pro Gly Gly Leu Val
        130                 135                 140

Ala Leu Thr Ser Asp Thr Gly Cys Asp Arg Leu Val Arg Ser Arg Asp
```

```
145                    150                    155                    160

Gly Pro Asp His Ala Cys Pro Leu Gly Gly Pro Ser His
                    165                 170


<210> 79
<211> 208
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (208)
<223> Xaa equals stop translation

<400> 79
Met Ala Asp Ser Ser Tyr Thr Ser Glu Val Gln Ala Ile Leu Ala Phe
 1               5                  10                  15

Leu Ser Leu Gln Arg Thr Gly Ser Gly Gly Pro Gly Asn His Pro His
            20                  25                  30

Gly Pro Asp Ala Ser Ala Glu Gly Leu Asn Pro Tyr Gly Leu Val Ala
         35                  40                  45

Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu Thr Pro Arg Ile
      50                  55                  60

Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala Glu Ala Gln
 65                  70                  75                  80

Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly Ile Ser
               85                  90                  95

Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile Leu Gly
            100                 105                 110

Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly Asp Val
         115                 120                 125

Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val Asn Trp
      130                 135                 140

Asp Ile Arg Xaa Val Ala Ile Glu Phe Asp Glu His Ile Asn Val Ala
145                 150                 155                 160

Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr Ile Gly
```

```
               165                  170                    175

Gly Tyr Ile Phe Leu Ser Thr Arg Glu Xaa Ala Arg Gly Glu Glu Leu
            180                  185                  190

Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala Phe Xaa
         195                  200                  205
```

```
<210> 80
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation

<400> 80
Met Pro Ser Gly Phe Gln Thr Cys Leu Leu Phe Thr Leu Ser Pro Phe
 1               5                  10                  15

Ser Leu Ser Lys Ile Val Gly Val Pro Ser Gln Gln Leu Pro Gly Gln
            20                  25                  30

Leu Ser Glu Gln Gly Gly Leu Cys Gly His Glu Gly Glu Pro Ala Arg
         35                  40                  45

Thr Val Pro Glu Thr Gln Leu Pro Leu Pro Phe Asn Ser Ala Gly Pro
      50                  55                  60

Pro His Leu Lys Cys Thr Gly Ala Gly Lys Arg Val Trp Ser Pro Pro
65                  70                  75                  80

Arg Arg Ala Ala Gln Glu Val Ser Leu Gln Leu Val Ser Cys Xaa Pro
                85                  90                  95

Cys Arg Gln Xaa Thr Ser Arg Ala Phe Ser Leu Ala Thr Asp Arg Thr
            100                 105                 110

Ala Ser Ala Arg Val Cys Cys Arg Phe Pro Phe Lys His Thr His Ser
            115                 120                 125

Pro His Pro Arg Arg Pro Glu Val Gln Gly Ala Trp Ala Val Val Pro
```

```
        130                    135                    140

Leu Xaa
145


<210> 81
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals stop translation

<400> 81
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Thr Ala Cys Ser Ser
  1               5                  10                  15

Ala Cys Ile Cys Phe Cys Xaa
              20


<210> 82
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals stop translation

<400> 82
Met Lys Thr Leu Phe Leu Gly Val Thr Leu Gly Leu Ala Leu Pro Cys
  1               5                  10                  15

Pro Ser Pro Trp Xaa Arg Arg Ile Ser Gln Gly Pro Gly Thr Xaa
              20                  25                  30


<210> 83
<211> 374
<212> PRT
<213> Homo sapiens

<400> 83
Met Ser Val Pro Ala Phe Ile Asp Ile Ser Glu Glu Asp Gln Ala Ala
  1               5                  10                  15

Glu Leu Arg Ala Tyr Leu Lys Ser Lys Gly Ala Glu Ile Ser Glu Glu
              20                  25                  30
```

```
Asn Ser Glu Gly Gly Leu His Val Asp Leu Ala Gln Ile Ile Glu Ala
         35                  40                  45

Cys Asp Val Cys Leu Lys Glu Asp Asp Lys Asp Val Glu Ser Val Met
         50                  55                  60

Asn Ser Val Val Ser Leu Leu Leu Ile Leu Glu Pro Asp Lys Gln Glu
     65                  70                  75                  80

Ala Leu Ile Glu Ser Leu Cys Glu Lys Leu Val Lys Phe Arg Glu Gly
                 85                  90                  95

Glu Arg Pro Ser Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His Gly
             100                 105                 110

Met Asp Lys Asn Thr Pro Val Arg Tyr Thr Val Tyr Cys Ser Leu Ile
         115                 120                 125

Lys Val Ala Ala Ser Cys Gly Ala Ile Gln Tyr Ile Pro Thr Glu Leu
         130                 135                 140

Asp Gln Val Arg Lys Trp Ile Ser Asp Trp Asn Leu Thr Thr Glu Lys
145                 150                 155                 160

Lys His Thr Leu Leu Arg Leu Leu Tyr Glu Ala Leu Val Asp Cys Lys
                 165                 170                 175

Lys Ser Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser Tyr
             180                 185                 190

Thr Glu Asp Asn Ala Ser Gln Ala Arg Val Asp Ala His Arg Cys Ile
         195                 200                 205

Val Arg Ala Leu Lys Asp Pro Asn Ala Phe Leu Phe Asp His Leu Leu
         210                 215                 220

Thr Leu Lys Pro Val Lys Phe Leu Glu Gly Glu Leu Ile His Asp Leu
225                 230                 235                 240

Leu Thr Ile Phe Val Ser Ala Lys Leu Ala Ser Tyr Val Lys Phe Tyr
                 245                 250                 255

Gln Asn Asn Lys Asp Phe Ile Asp Ser Leu Gly Leu Leu His Glu Gln
             260                 265                 270

Asn Met Ala Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val Glu
         275                 280                 285

Asn Lys Glu Ile Ser Phe Asp Thr Met Gln Gln Glu Leu Gln Ile Gly
         290                 295                 300

Ala Asp Asp Val Glu Ala Phe Val Ile Asp Ala Val Arg Thr Lys Met
305                 310                 315                 320

Val Tyr Cys Lys Ile Asp Gln Thr Gln Arg Lys Val Val Val Ser His
             325                 330                 335
```

```
Ser Thr His Arg Thr Phe Gly Lys Gln Gln Trp Gln Gln Leu Tyr Asp
          340                 345                 350

Thr Leu Asn Ala Trp Lys Gln Asn Leu Asn Lys Val Lys Asn Ser Leu
          355                 360                 365

Leu Ser Leu Ser Asp Thr
      370


<210> 84
<211> 13
<212> PRT
<213> Homo sapiens

<400> 84
Met Ser Val Pro Ala Phe Ile Asp Ile Ser Glu Glu Asp
  1               5                   10


<210> 85
<211> 15
<212> PRT
<213> Homo sapiens

<400> 85
Gln Ala Ala Glu Leu Arg Ala Tyr Leu Lys Ser Lys Gly Ala Glu
  1               5                   10                  15


<210> 86
<211> 17
<212> PRT
<213> Homo sapiens

<400> 86
Ile Ser Glu Glu Asn Ser Glu Gly Gly Leu His Val Asp Leu Ala Gln
  1               5                   10                  15

Ile


<210> 87
<211> 18
<212> PRT
<213> Homo sapiens

<400> 87
Ile Glu Ala Cys Asp Val Cys Leu Lys Glu Asp Asp Lys Asp Val Glu
  1               5                   10                  15

Ser Val


<210> 88
<211> 16
```

```
<212> PRT
<213> Homo sapiens

<400> 88
Val Ala Arg Pro Ser Ser Leu Phe Arg Ser Ala Trp Ser Cys Glu Trp
  1               5                  10                  15




<210> 89
<211> 12
<212> PRT
<213> Homo sapiens

<400> 89
Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His Gly
  1               5                  10


<210> 90
<211> 17
<212> PRT
<213> Homo sapiens

<400> 90
Lys Asp Val Glu Ser Val Met Asn Ser Val Val Ser Leu Leu Leu Ile
  1               5                  10                  15

Leu



<210> 91
<211> 26
<212> PRT
<213> Homo sapiens

<400> 91
Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser Tyr Thr Glu
  1               5                  10                  15

Asp Asn Ala Ser Gln Ala Arg Val Asp Ala
            20                  25


<210> 92
<211> 10
<212> PRT
<213> Homo sapiens

<400> 92
Val Glu Ala Phe Val Ile Asp Ala Val Arg
  1               5                  10


<210> 93
```

<211> 18
<212> PRT
<213> Homo sapiens

<400> 93
Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val Glu Asn Lys Glu
 1   5   10   15

Ile Ser

<210> 94
<211> 196
<212> PRT
<213> Homo sapiens

<400> 94
Met Glu Ala Val Pro Glu Gly Asp Trp Phe Cys Thr Val Cys Leu Ala
 1   5   10   15

Gln Gln Val Glu Gly Glu Phe Thr Gln Lys Pro Gly Phe Pro Lys Arg
            20   25   30

Gly Gln Lys Arg Lys Ser Gly Tyr Ser Leu Asn Phe Ser Glu Gly Asp
        35   40   45

Gly Arg Arg Arg Arg Val Leu Leu Arg Gly Arg Glu Ser Pro Ala Ala
     50   55   60

Gly Pro Arg Tyr Ser Glu Glu Gly Leu Ser Pro Ser Lys Arg Arg Arg
 65   70   75   80

Leu Ser Met Arg Asn His His Ser Asp Leu Thr Phe Cys Glu Ile Ile
                85   90   95

Leu Met Glu Met Glu Ser His Asp Ala Ala Trp Pro Phe Leu Glu Pro
            100   105   110

Val Asn Pro Arg Leu Val Ser Gly Tyr Arg Arg Ile Ile Lys Asn Pro
            115   120   125

Met Asp Phe Ser Thr Met Arg Glu Arg Leu Leu Arg Gly Gly Tyr Thr
        130   135   140

Ser Ser Glu Glu Phe Ala Ala Asp Ala Leu Leu Val Phe Asp Asn Cys
145   150   155   160

Gln Thr Phe Asn Glu Asp Asp Ser Glu Val Gly Lys Ala Gly His Ile
                165   170   175

Met Arg Arg Phe Phe Glu Ser Arg Trp Glu Glu Phe Tyr Gln Gly Lys
            180   185   190

Gln Ala Asn Leu
            195

<210> 95
<211> 20
<212> PRT
<213> Homo sapiens

<400> 95
Met Glu Ala Val Pro Glu Gly Asp Trp Phe Cys Thr Val Cys Leu Ala
1   5   10   15

Gln Gln Val Glu
            20

<210> 96
<211> 21
<212> PRT
<213> Homo sapiens

<400> 96
Gly Glu Phe Thr Gln Lys Pro Gly Phe Pro Lys Arg Gly Gln Lys Arg
1   5   10   15

Lys Ser Gly Tyr Ser
            20

<210> 97
<211> 21
<212> PRT
<213> Homo sapiens

<400> 97
Leu Asn Phe Ser Glu Gly Asp Gly Arg Arg Arg Arg Val Leu Leu Arg
1   5   10   15

Gly Arg Glu Ser Pro
            20

<210> 98
<211> 20
<212> PRT
<213> Homo sapiens

<400> 98
Ala Ala Gly Pro Arg Tyr Ser Glu Glu Gly Leu Ser Pro Ser Lys Arg
1   5   10   15

Arg Arg Leu Ser
            20

<210> 99
<211> 21
<212> PRT
<213> Homo sapiens

<400> 99

```
Met Arg Asn His His Ser Asp Leu Thr Phe Cys Glu Ile Ile Leu Met
 1               5                   10                  15

Glu Met Glu Ser His
              20


<210> 100
<211> 20
<212> PRT
<213> Homo sapiens

<400> 100
Asp Ala Ala Trp Pro Phe Leu Glu Pro Val Asn Pro Arg Leu Val Ser
 1               5                   10                  15

Gly Tyr Arg Arg
              20


<210> 101
<211> 21
<212> PRT
<213> Homo sapiens

<400> 101
Ile Ile Lys Asn Pro Met Asp Phe Ser Thr Met Arg Glu Arg Leu Leu
 1               5                   10                  15

Arg Gly Gly Tyr Thr
              20


<210> 102
<211> 21
<212> PRT
<213> Homo sapiens

<400> 102
Ser Ser Glu Glu Phe Ala Ala Asp Ala Leu Leu Val Phe Asp Asn Cys
 1               5                   10                  15

Gln Thr Phe Asn Glu
              20


<210> 103
<211> 17
<212> PRT
<213> Homo sapiens

<400> 103
Asp Asp Ser Glu Val Gly Lys Ala Gly His Ile Met Arg Arg Phe Phe
 1               5                   10                  15

Glu
```

```
<210> 104
<211> 14
<212> PRT
<213> Homo sapiens

<400> 104
Ser Arg Trp Glu Glu Phe Tyr Gln Gly Lys Gln Ala Asn Leu
 1               5                  10


<210> 105
<211> 35
<212> PRT
<213> Homo sapiens

<400> 105
Met Ser Glu Ile Tyr Leu Arg Cys Gln Asp Glu Gln Gln Tyr Ala Arg
 1               5                  10                  15

Trp Met Ala Gly Cys Arg Leu Ala Ser Lys Gly Arg Thr Met Ala Asp
                20                  25                  30

Ser Ser Tyr
          35


<210> 106
<211> 45
<212> PRT
<213> Homo sapiens

<400> 106
Leu Val Ala Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu Thr
 1               5                  10                  15

Pro Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala
                20                  25                  30

Glu Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu
          35                  40                  45


<210> 107
<211> 23
<212> PRT
<213> Homo sapiens

<400> 107
Val Gly Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp
 1               5                  10                  15

Asn Val Asn Trp Asp Ile Arg
                20


<210> 108
<211> 26
```

<212> PRT
<213> Homo sapiens

<400> 108
Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met Val Phe Ala Ala Leu
1   5   10   15

Gln Tyr His Ile Asn Lys Leu Ser Gln Ser
            20   25

<210> 109
<211> 26
<212> PRT
<213> Homo sapiens

<400> 109
Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met Val Phe Ala Ala Leu
1   5   10   15

Gln Tyr His Ile Asn Lys Leu Ser Gln Ser
            20   25

<210> 110
<211> 26
<212> PRT
<213> Homo sapiens

<400> 110
Lys Glu Leu Ser Phe Ala Arg Ile Lys Ala Val Glu Cys Val Glu Ser
1   5   10   15

Thr Gly Arg His Ile Tyr Phe Thr Leu Val
            20   25

<210> 111
<211> 17
<212> PRT
<213> Homo sapiens

<400> 111
Gly Trp Asn Ala Gln Ile Thr Leu Gly Leu Val Lys Phe Lys Asn Gln
1   5   10   15

Gln

<210> 112
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 112
Met Val Thr Thr Ile Val Leu Gly Arg Arg Phe Ile Gly Ser Ile Val
 1               5                  10                  15

Lys Glu Ala Ser Gln Arg Gly Lys Val Ser Leu Phe Arg Ser Ile Leu
            20                  25                  30

Leu Phe Leu Thr Arg Phe Thr Val Leu Thr Ala Thr Gly Trp Ser Leu
        35                  40                  45

Cys Arg Ser Leu Ile His Leu Phe Arg Thr Tyr Ser Phe Leu Asn Leu
    50                  55                  60

Leu Phe Leu Cys Tyr Pro Phe Gly Met Tyr Ile Pro Phe Leu Gln Leu
65                  70                  75                  80

Asn Xaa Xaa Leu Arg Lys Thr Ser Leu Phe Asn His Met Ala Ser Met
                85                  90                  95

Gly Pro Arg Glu Ala Val Ser Gly Leu Ala Lys Ser Arg Asp Tyr Leu
            100                 105                 110

Leu Thr Leu Arg Glu Thr Trp Lys Gln His Xaa Arg Gln Leu Tyr Gly
        115                 120                 125

Pro Asp Ala Met Pro Thr His Ala Cys Cys Leu Ser Pro Ser Leu Ile
    130                 135                 140

Arg Ser Glu Val Glu Phe Leu Lys Met Asp Phe Asn Trp Arg Met Lys
145                 150                 155                 160

Glu Val Leu Val Ser Ser Met Leu Ser Ala Tyr Tyr Val Ala Phe Val
            165                 170                 175

Pro Val Trp Phe Val Lys Asn Thr His Tyr Tyr Asp Lys Arg Trp Ser
            180                 185                 190

Cys Xaa Thr Leu Pro Ala Gly Val His Gln His Leu Arg Asp Pro His
    195                 200                 205

Ala Ala Pro Ala Ala Cys Gln Leu Leu
```

210   215

<210> 113
<211> 26
<212> PRT
<213> Homo sapiens

<400> 113
Met Val Thr Thr Ile Val Leu Gly Arg Arg Phe Ile Gly Ser Ile Val
 1   5   10   15

Lys Glu Ala Ser Gln Arg Gly Lys Val Ser
            20   25

<210> 114
<211> 23
<212> PRT
<213> Homo sapiens

<400> 114
Leu Phe Arg Ser Ile Leu Leu Phe Leu Thr Arg Phe Thr Val Leu Thr
 1   5   10   15

Ala Thr Gly Trp Ser Leu Cys
            20

<210> 115
<211> 30
<212> PRT
<213> Homo sapiens

<400> 115
Arg Ser Leu Ile His Leu Phe Arg Thr Tyr Ser Phe Leu Asn Leu Leu
 1   5   10   15

Phe Leu Cys Tyr Pro Phe Gly Met Tyr Ile Pro Phe Leu Gln
            20   25   30

<210> 116
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 116

```
Leu Asn Xaa Xaa Leu Arg Lys Thr Ser Leu Phe Asn His Met Ala Ser
 1               5                  10                  15

Met Gly Pro Arg Glu Ala Val Ser Gly Leu Ala Lys Ser Arg
            20                  25                  30


<210> 117
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 117
Asp Tyr Leu Leu Thr Leu Arg Glu Thr Trp Lys Gln His Xaa Arg Gln
 1               5                  10                  15

Leu Tyr Gly Pro Asp Ala Met Pro Thr His Ala Cys Cys Leu
            20                  25                  30


<210> 118
<211> 31
<212> PRT
<213> Homo sapiens

<400> 118
Ser Pro Ser Leu Ile Arg Ser Glu Val Glu Phe Leu Lys Met Asp Phe
 1               5                  10                  15

Asn Trp Arg Met Lys Glu Val Leu Val Ser Ser Met Leu Ser Ala
            20                  25                  30


<210> 119
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 119
Tyr Tyr Val Ala Phe Val Pro Val Trp Phe Val Lys Asn Thr His Tyr
 1               5                  10                  15

Tyr Asp Lys Arg Trp Ser Cys Xaa Thr Leu Pro
            20                  25


<210> 120
<211> 20
```

```
<212> PRT
<213> Homo sapiens

<400> 120
Ala Gly Val His Gln His Leu Arg Asp Pro His Ala Ala Pro Ala Ala
 1               5                   10                  15

Cys Gln Leu Leu
            20


<210> 121
<211> 16
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 121
Leu Val Leu Gly Leu Ser Xaa Leu Asn Asn Ser Tyr Asn Phe Ser Phe
 1               5                   10                  15




<210> 122
<211> 17
<212> PRT
<213> Homo sapiens

<400> 122
His Val Val Ile Gly Ser Gln Ala Glu Glu Gly Gln Tyr Ser Leu Asn
 1               5                   10                  15

Phe



<210> 123
<211> 19
<212> PRT
<213> Homo sapiens

<400> 123
His Asn Cys Asn Asn Ser Val Pro Gly Lys Glu His Pro Phe Asp Ile
 1               5                   10                  15

Thr Val Met



<210> 124
<211> 17
<212> PRT
```

<213> Homo sapiens

<400> 124
Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe Gly Ile
1   5   10   15

Val

<210> 125
<211> 13
<212> PRT
<213> Homo sapiens

<400> 125
Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile
1   5   10

<210> 126
<211> 13
<212> PRT
<213> Homo sapiens

<400> 126
Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile
1   5   10

<210> 127
<211> 15
<212> PRT
<213> Homo sapiens

<400> 127
Asp Gly Lys Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg
1   5   10   15

<210> 128
<211> 13
<212> PRT
<213> Homo sapiens

<400> 128
Ile Arg Glu Lys Asn Pro Asp Gly Phe Leu Ser Ala Ala
1   5   10

<210> 129
<211> 9
<212> PRT
<213> Homo sapiens

<400> 129
Met Met Phe Gly Gly Tyr Glu Thr Ile
1   5

```
<210> 130
<211> 24
<212> PRT
<213> Homo sapiens

<400> 130
Tyr Arg Asp Glu Ser Ser Ser Glu Leu Ser Val Asp Ser Glu Val Glu
1               5                   10                  15

Phe Gln Leu Tyr Ser Gln Ile His
            20


<210> 131
<211> 136
<212> PRT
<213> Homo sapiens

<400> 131
Tyr Ala Gln Asp Leu Asp Asp Val Ile Arg Glu Glu Glu His Glu Glu
1               5                   10                  15

Lys Asn Ser Gly Asn Ser Glu Ser Ser Ser Ser Lys Pro Asn Gln Lys
            20                  25                  30

Lys Leu Ile Val Leu Ser Asp Ser Glu Val Ile Gln Leu Ser Asp Gly
        35                  40                  45

Ser Glu Val Ile Thr Leu Ser Asp Glu Asp Ser Ile Tyr Arg Cys Lys
    50                  55                  60

Gly Lys Asn Val Arg Val Gln Ala Gln Glu Asn Ala His Gly Leu Ser
65                  70                  75                  80

Ser Ser Leu Gln Ser Asn Glu Leu Val Asp Lys Lys Cys Lys Ser Asp
                85                  90                  95

Ile Glu Lys Pro Lys Ser Glu Glu Arg Ser Gly Val Ile Arg Glu Val
            100                 105                 110

Met Ile Ile Glu Val Ser Ser Ser Glu Glu Glu Glu Ser Thr Ile Ser
        115                 120                 125

Glu Gly Asp Asn Val Glu Ser Trp
    130                 135


<210> 132
<211> 37
<212> PRT
<213> Homo sapiens

<400> 132
Met Leu Leu Gly Cys Glu Val Asp Asp Lys Asp Asp Asp Ile Leu Leu
1               5                   10                  15
```

```
Asn Leu Val Gly Cys Glu Asn Ser Val Thr Glu Gly Glu Asp Gly Ile
            20                  25                  30

Asn Trp Ser Ile Ser
          35


<210> 133
<211> 18
<212> PRT
<213> Homo sapiens

<400> 133
Asp Lys Asp Ile Glu Ala Gln Ile Ala Asn Asn Arg Thr Pro Gly Arg
  1               5                  10                  15

Trp Thr


<210> 134
<211> 31
<212> PRT
<213> Homo sapiens

<400> 134
Gln Arg Tyr Tyr Ser Ala Asn Lys Asn Ile Ile Cys Arg Asn Cys Asp
  1               5                  10                  15

Lys Arg Gly His Leu Ser Lys Asn Cys Pro Leu Pro Arg Lys Val
            20                  25                  30


<210> 135
<211> 179
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 135
Arg Arg Cys Phe Leu Cys Ser Arg Arg Gly His Leu Leu Tyr Ser Cys
  1               5                  10                  15

Pro Ala Pro Leu Cys Glu Tyr Cys Pro Val Pro Lys Met Leu Asp His
            20                  25                  30

Ser Cys Leu Phe Arg His Ser Trp Asp Lys Gln Cys Asp Arg Cys His
          35                  40                  45
```

```
Met Leu Gly His Tyr Thr Asp Ala Cys Thr Glu Ile Trp Arg Gln Tyr
    50                  55                  60

His Leu Thr Thr Lys Pro Gly Pro Pro Lys Lys Pro Lys Thr Pro Ser
65                  70                  75                  80

Arg Pro Ser Ala Leu Ala Tyr Cys Tyr His Cys Ala Gln Lys Gly His
                85                  90                  95

Tyr Gly His Glu Cys Pro Glu Arg Glu Val Tyr Asp Pro Ser Pro Val
            100                 105                 110

Ser Pro Phe Ile Cys Tyr Tyr Xaa Asp Lys Tyr Glu Ile Gln Glu Arg
            115                 120                 125

Glu Lys Arg Leu Lys Gln Lys Ile Lys Val Xaa Lys Lys Asn Gly Val
    130                 135                 140

Ile Pro Glu Pro Ser Lys Leu Pro Tyr Ile Lys Ala Ala Asn Glu Asn
145                 150                 155                 160

Pro His His Asp Ile Arg Lys Gly Arg Ala Ser Trp Lys Ser Asn Arg
                165                 170                 175

Trp Pro Gln


<210> 136
<211> 416
<212> PRT
<213> Homo sapiens

<400> 136
Met Ser Phe Pro Pro His Leu Asn Arg Pro Pro Met Gly Ile Pro Ala
1               5                   10                  15

Leu Pro Pro Gly Ile Pro Pro Pro Gln Phe Pro Gly Phe Pro Pro Pro
                20                  25                  30

Val Pro Pro Gly Thr Pro Met Ile Pro Val Pro Met Ser Ile Met Ala
            35                  40                  45

Pro Ala Pro Thr Val Leu Val Pro Thr Val Ser Met Val Gly Lys His
    50                  55                  60

Leu Gly Ala Arg Lys Asp His Pro Gly Leu Lys Ala Lys Glu Asn Asp
65                  70                  75                  80

Glu Asn Cys Gly Pro Thr Thr Thr Val Phe Val Gly Asn Ile Ser Glu
                85                  90                  95

Lys Ala Ser Asp Met Leu Ile Arg Gln Leu Leu Ala Lys Cys Gly Leu
            100                 105                 110

Val Leu Ser Trp Lys Arg Val Gln Gly Ala Ser Gly Lys Leu Gln Alà
            115                 120                 125
```

```
Phe Gly Phe Cys Glu Tyr Lys Glu Pro Glu Ser Thr Leu Arg Ala Leu
    130                 135             140

Arg Leu Leu His Asp Leu Gln Ile Gly Glu Lys Lys Leu Leu Val Lys
145                 150             155                 160

Val Asp Ala Lys Thr Lys Ala Gln Leu Asp Glu Trp Lys Ala Lys Lys
                165             170             175

Lys Ala Ser Asn Gly Asn Ala Arg Pro Glu Thr Val Thr Asn Asp Asp
            180             185             190

Glu Glu Ala Leu Asp Glu Glu Thr Lys Arg Arg Asp Gln Met Ile Lys
        195             200             205

Gly Ala Ile Glu Val Leu Ile Arg Glu Tyr Ser Ser Glu Leu Asn Ala
    210             215             220

Pro Ser Gln Glu Ser Asp Ser His Pro Arg Lys Lys Lys Lys Glu Lys
225             230             235             240

Lys Glu Asp Ile Phe Arg Arg Phe Pro Val Ala Pro Leu Ile Pro Tyr
            245             250             255

Pro Leu Ile Thr Lys Glu Asp Ile Asn Ala Ile Glu Met Glu Glu Asp
            260             265             270

Lys Arg Asp Leu Ile Ser Arg Glu Ile Ser Lys Phe Arg Asp Thr His
        275             280             285

Lys Lys Leu Glu Glu Glu Lys Gly Lys Lys Glu Lys Glu Arg Gln Glu
    290             295             300

Ile Glu Lys Glu Arg Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg
305             310             315             320

Glu Arg Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
            325             330             335

Lys Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Asp Arg Asp Arg Asp
            340             345             350

Arg Thr Lys Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp
            355             360             365

Arg Asp Arg Glu Arg Ser Ser Asp Arg Asn Lys Asp Arg Ile Arg Ser
    370             375             380

Arg Glu Lys Ser Arg Asp Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
385             390             395             400

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
            405             410             415
```

<210> 137
<211> 43
<212> PRT
<213> Homo sapiens

<400> 137
Met Ser Phe Pro Pro His Leu Asn Arg Pro Pro Met Gly Ile Pro Ala
1   5   10   15

Leu Pro Pro Gly Ile Pro Pro Pro Gln Phe Pro Gly Phe Pro Pro Pro
            20   25   30

Val Pro Pro Gly Thr Pro Met Ile Pro Val Pro
        35   40

<210> 138
<211> 35
<212> PRT
<213> Homo sapiens

<400> 138
Met Ser Ile Met Ala Pro Ala Pro Thr Val Leu Val Pro Thr Val Ser
1   5   10   15

Met Val Gly Lys His Leu Gly Ala Arg Lys Asp His Pro Gly Leu Lys
            20   25   30

Ala Lys Glu
        35

<210> 139
<211> 41
<212> PRT
<213> Homo sapiens

<400> 139
Asn Asp Glu Asn Cys Gly Pro Thr Thr Thr Val Phe Val Gly Asn Ile
1   5   10   15

Ser Glu Lys Ala Ser Asp Met Leu Ile Arg Gln Leu Leu Ala Lys Cys
            20   25   30

Gly Leu Val Leu Ser Trp Lys Arg Val
        35   40

<210> 140
<211> 40
<212> PRT
<213> Homo sapiens

<400> 140
Gln Gly Ala Ser Gly Lys Leu Gln Ala Phe Gly Phe Cys Glu Tyr Lys
1   5   10   15

Glu Pro Glu Ser Thr Leu Arg Ala Leu Arg Leu Leu His Asp Leu Gln

```
                20                    25                    30
```

Ile Gly Glu Lys Lys Leu Leu Val
          35   40

<210> 141
<211> 39
<212> PRT
<213> Homo sapiens

<400> 141
Lys Val Asp Ala Lys Thr Lys Ala Gln Leu Asp Glu Trp Lys Ala Lys
  1   5   10   15

Lys Lys Ala Ser Asn Gly Asn Ala Arg Pro Glu Thr Val Thr Asn Asp
              20   25   30

Asp Glu Glu Ala Leu Asp Glu
          35

<210> 142
<211> 40
<212> PRT
<213> Homo sapiens

<400> 142
Glu Thr Lys Arg Arg Asp Gln Met Ile Lys Gly Ala Ile Glu Val Leu
  1   5   10   15

Ile Arg Glu Tyr Ser Ser Glu Leu Asn Ala Pro Ser Gln Glu Ser Asp
              20   25   30

Ser His Pro Arg Lys Lys Lys Lys
          35   40

<210> 143
<211> 44
<212> PRT
<213> Homo sapiens

<400> 143
Glu Lys Lys Glu Asp Ile Phe Arg Arg Phe Pro Val Ala Pro Leu Ile
  1   5   10   15

Pro Tyr Pro Leu Ile Thr Lys Glu Asp Ile Asn Ala Ile Glu Met Glu
              20   25   30

Glu Asp Lys Arg Asp Leu Ile Ser Arg Glu Ile Ser
          35   40

<210> 144
<211> 41
<212> PRT
<213> Homo sapiens

```
<400> 144
Lys Phe Arg Asp Thr His Lys Lys Leu Glu Glu Glu Lys Gly Lys Lys
  1               5                   10                  15

Glu Lys Glu Arg Gln Glu Ile Glu Lys Glu Arg Arg Glu Arg Glu Arg
            20                  25                  30

Glu Arg Glu Arg Glu Arg Glu Arg
        35                  40


<210> 145
<211> 93
<212> PRT
<213> Homo sapiens

<400> 145
Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Lys Glu Lys
  1               5                   10                  15

Glu Arg Glu Arg Glu Arg Glu Arg Asp Arg Asp Arg Asp Arg Thr Lys
            20                  25                  30

Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp Arg Asp Arg
        35                  40                  45

Glu Arg Ser Ser Asp Arg Asn Lys Asp Arg Ile Arg Ser Arg Glu Lys
     50                  55                  60

Ser Arg Asp Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg
 65                  70                  75                  80

Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
                85                  90


<210> 146
<211> 52
<212> PRT
<213> Homo sapiens

<400> 146
Arg Asp Arg Asp Arg Asp Arg Glu Arg Ser Ser Asp Arg Asn Lys Asp
  1               5                   10                  15

Arg Ile Arg Ser Arg Glu Lys Ser Arg Asp Arg Glu Arg Glu Arg Glu
            20                  25                  30

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
        35                  40                  45

Arg Glu Arg Glu
     50


<210> 147
<211> 22
```

```
<212> PRT
<213> Homo sapiens

<400> 147
Lys Pro Gln Met Glu Gly Arg Leu Val Gly Gly Gly Gly Ser Phe Ser
 1               5                   10                  15

Ser Arg Gly Arg His Pro
            20


<210> 148
<211> 25
<212> PRT
<213> Homo sapiens

<400> 148
Leu Leu Val Pro Ser Pro Ser Leu Leu Pro Ala Val Ser Ser Tyr His
 1               5                   10                  15

Leu Pro Leu Gly Arg Gly Leu Ile Arg
            20                  25


<210> 149
<211> 23
<212> PRT
<213> Homo sapiens

<400> 149
Glu Gln Gly Ser Ala Val Arg Ser Pro Ala Phe Pro Val Arg Gln Ala
 1               5                   10                  15

Trp Leu Pro Cys Ser Gly Ser
            20


<210> 150
<211> 151
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 150
Met Gly Leu Asn Pro Pro Gly Leu Thr Ser Ala Leu Lys Pro Gln Met
 1               5                   10                  15

Glu Gly Arg Leu Val Gly Gly Gly Gly Ser Phe Ser Ser Arg Gly Arg
            20                  25                  30

His Pro Ala Gly Trp Val Leu Pro Gln Pro Cys Leu Leu Leu Ser Pro
         35                  40                  45

Thr Leu Ser Phe Pro Pro Ala Cys Gly Leu Leu Val Pro Ser Pro Ser
```

```
        50                      55                      60

Leu Leu Pro Ala Val Ser Ser Tyr His Leu Pro Leu Gly Arg Gly Leu
 65                      70                      75                      80

Ile Arg Pro Ala Phe Lys Ile Lys Val Cys Ser Lys Leu Thr Val Trp
                        85                      90                      95

Cys Ser Leu Pro Ser Pro Ser Arg Trp Arg Cys Cys His Gly Asn Ala
                100                     105                     110

Val Ala Leu Pro Ala Leu Gly Pro Trp Arg Xaa Trp Glu Gln Gly Ser
            115                     120                     125

Ala Val Arg Ser Pro Ala Phe Pro Val Arg Gln Ala Trp Leu Pro Cys
            130                     135                     140

Ser Gly Ser Leu Thr Ser Trp
145                     150
```

```
<210> 151
<211> 64
<212> PRT
<213> Homo sapiens

<400> 151
Asn Val Thr Lys Ile Thr Leu Glu Ser Phe Leu Ala Trp Lys Lys Arg
 1                       5                      10                      15

Lys Arg Gln Glu Lys Ile Asp Lys Leu Glu Gln Asp Met Glu Arg Arg
                20                      25                      30

Lys Ala Asp Phe Lys Ala Gly Lys Ala Leu Val Ile Ser Gly Arg Glu
            35                      40                      45

Val Phe Glu Phe Arg Pro Glu Leu Val Asn Asp Asp Asp Glu Glu Ala
        50                      55                      60
```

```
<210> 152
<211> 22
<212> PRT
<213> Homo sapiens

<400> 152
Glu Arg Arg Lys Ala Asp Phe Lys Ala Gly Lys Ala Leu Val Ile Ser
 1                       5                      10                      15

Gly Arg Glu Val Phe Glu
                20
```

```
<210> 153
<211> 89
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 153

```
Met Cys Asp Glu Leu Pro Gly Glu Gly Arg Trp Glu Pro Gly Gln Asp
 1               5                  10                  15

Arg Lys Leu Cys Leu Ser Phe Pro Leu Gly Thr Pro Ala Arg Pro Ile
            20                  25                  30

Lys Ser Val Cys Pro Thr Leu Leu Ser Leu Val Phe Leu Ser Arg Gly
        35                  40                  45

Met Glu Gln Arg Val Arg Glu Ala Val Ala Val Ser Thr Ser Ala Pro
     50                  55                  60

Ala Pro Ser Ala Ser Glu Pro Phe Leu Ser Trp Gly Met Gly Leu Ala
 65                  70                  75                  80

Xaa Phe Ser Phe Pro Phe Leu Tyr Leu
                85
```

<210> 154
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 154

```
Gly Ala Ser Leu Gly Ser Ser Ser Ser Cys Pro Ser His Ser Trp Trp
 1               5                  10                  15

Gly Gln Arg Ser Val Cys Arg Glu Thr Ala Ser Pro Leu Pro Arg Trp
            20                  25                  30

Met Leu Tyr Leu Asp Gly Leu Ala Thr Ser His Phe Leu His His Pro
        35                  40                  45

Glu Pro His Leu Leu Pro Ser Pro Gly Val Phe Thr Arg Leu Cys Cys
     50                  55                  60

His Leu Cys Pro Gly His Xaa Ser Leu Ser Gly Cys Val Met Asn Ser
 65                  70                  75                  80

Gln Glu Arg Glu Asp Gly Ser Gln Gly Lys Ile Gly Ser Ser Ala
                85                  90                  95
```

```
<210> 155
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 155
Thr Ser Val Leu Ser Ser Ser Ser Val Tyr Cys Met Gln Ala Arg Lys
  1               5                  10                  15

Leu Ser Val Ser Gln Arg Tyr Arg Lys Gly Lys Glu Lys Xaa Ala Arg
                 20                  25                  30

Pro Ile Pro Gln Glu Arg Lys Gly Ser Asp Ala Glu Gly Ala Gly Ala
             35                  40                  45

Glu Val Glu Thr Ala Thr Ala Ser Leu Thr Leu Cys Ser Ile Pro Leu
     50                  55                  60

Leu Lys Leu Thr Arg Leu Ser Arg Val Gly Gln Thr Leu Phe Ile Gly
 65                  70                  75                  80

Leu Ala Gly Val Pro Ser Gly Lys Leu Arg Gln Ser Phe Leu Ser Cys
                 85                  90                  95

Pro Gly Ser His Leu Pro Ser Pro Gly Ser Ser Ser His Ile Pro Arg
             100                 105                 110

Gly Lys Xaa Val Leu Gly Arg Gly Gly Ser Lys Ala Gly
         115                 120                 125


<210> 156
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 156
Ala Leu Val Lys Gly Thr Gly Arg Glu Lys Arg Arg Xaa Gln Gly Pro
```

```
  1               5                    10                       15
Ser Pro Lys Lys Gly Arg Ala Leu Met Gln Arg Glu Gln Glu Leu Arg
                20              25              30
Trp Arg Arg Pro Leu Pro Leu Ser Pro Ser Val Pro Ser Leu Cys Ser
            35              40              45
Arg Lys Pro Gly Leu Ala Glu Trp Asp Arg Arg Phe Leu Leu Val Trp
        50              55              60
Leu Ala Cys Leu Val Glu Ser Ser Gly Arg Ala Ser Tyr Leu Ala Leu
 65              70                  75                          80
Ala Pro Ile Phe Pro Leu Leu Gly Val His His Thr Ser Arg Glu Gly
                85              90                      95
Xaa Val Ser Trp Ala Glu Val Ala Ala Lys Pro Gly Lys Asn Ser Arg
            100             105             110
Ala Gly Lys Gln Met Gly Leu Arg Val Met Gln Lys Met
        115             120             125
```

```
<210> 157
<211> 32
<212> PRT
<213> Homo sapiens

<400> 157
Ser Phe Pro Leu Gly Thr Pro Ala Arg Pro Ile Lys Ser Val Cys Pro
 1               5                    10                       15
Thr Leu Leu Ser Leu Val Phe Leu Ser Arg Gly Met Glu Gln Arg Val
                20              25              30
```

```
<210> 158
<211> 31
<212> PRT
<213> Homo sapiens

<400> 158
Thr Ala Ser Pro Leu Pro Arg Trp Met Leu Tyr Leu Asp Gly Leu Ala
 1               5                    10                       15
Thr Ser His Phe Leu His His Pro Glu Pro His Leu Leu Pro Ser
                20              25              30
```

```
<210> 159
<211> 31
<212> PRT
<213> Homo sapiens
```

<400> 159
Arg Lys Gly Ser Asp Ala Glu Gly Ala Gly Ala Glu Val Glu Thr Ala
1   5   10   15

Thr Ala Ser Leu Thr Leu Cys Ser Ile Pro Leu Leu Lys Lys Thr
                20   25   30

<210> 160
<211> 25
<212> PRT
<213> Homo sapiens

<400> 160
Gln Arg Glu Gln Glu Leu Arg Trp Arg Arg Pro Leu Pro Leu Ser Pro
1   5   10   15

Ser Val Pro Ser Leu Cys Ser Arg Lys
                20   25

<210> 161
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 161
Pro Leu Leu Gly Val His His Thr Ser Arg Glu Gly Xaa Val Ser Trp
1   5   10   15

Ala Glu Val Ala Ala Lys Pro Gly Lys Asn Ser Arg Ala
                20   25

<210> 162
<211> 73
<212> PRT
<213> Homo sapiens

<400> 162
Met Ser Val Leu Lys Gly Glu Arg Gln Gln Thr Leu Ala Leu Ala Val
1   5   10   15

Leu Ser Val Ala Gly Glu Asn Ala Arg Asp Val Cys Cys Leu Gln Gly
                20   25   30

Trp Gln Asp Thr Ser Cys Arg Asp Thr Ser Cys Ala Ala Leu Arg Gly
            35   40   45

Gly Leu Gln Thr Leu Phe Pro Ala Pro Val His Phe Arg Cys Gly Gly
        50   55   60

Pro Ala Glu Leu Lys Gly Arg Gly Ser

```
      65                          70


      <210> 163
      <211> 68
      <212> PRT
      <213> Homo sapiens

      <400> 163
      Ala His Ser Phe Thr Thr Pro Glu Glu Ala Arg Gly Ala Gly Ser Met
       1               5                  10                  15

      Gly Cys Arg Phe Pro Phe Lys His Thr His Ser Pro His Pro Arg Arg
                   20                  25                  30

      Pro Glu Val Gln Gly Ala Trp Ala Gly Cys Thr Ser Ala Gly Glu Lys
               35                  40                  45

      Ala Glu Pro Pro Pro Ser Arg Glu Pro Gly Ser Gln Ala Ser Arg Phe
           50                  55                  60

      Pro Leu Pro Pro
       65


      <210> 164
      <211> 25
      <212> PRT
      <213> Homo sapiens

      <400> 164
      Gly Trp Gln Asp Thr Ser Cys Arg Asp Thr Ser Cys Ala Ala Leu Arg
       1               5                  10                  15

      Gly Gly Leu Gln Thr Leu Phe Pro Ala
                   20                  25


      <210> 165
      <211> 24
      <212> PRT
      <213> Homo sapiens

      <400> 165
      Gly Cys Arg Phe Pro Phe Lys His Thr His Ser Pro His Pro Arg Arg
       1               5                  10                  15

      Pro Glu Val Gln Gly Ala Trp Ala
                   20


      <210> 166
      <211> 81
      <212> PRT
      <213> Homo sapiens

      <400> 166
      Pro His Gln Val Glu Gly Arg Leu Gly Thr Met Glu Thr Trp Asp Ser
```

```
     1                5                   10                        15
  Ser His Glu Gly Leu Leu His Cys Arg Ile Pro Leu Lys Gly Ser Trp
                  20                   25                     30
  Val Gln Glu Pro Ser Cys Gln Tyr Gln Trp Arg Arg Thr Arg Cys Met
            35                   40                   45
  Gly Ile Pro Pro Ala Thr Ser Gly Trp Pro Cys Arg Ala Pro Ala Phe
        50                   55                   60
  Leu Cys Ala Arg Ala Glu Phe Pro Ala Ser Pro Gly Gly Ser Thr Asn
   65                   70                   75                    80
  Phe
```

```
<210> 167
<211> 81
<212> PRT
<213> Homo sapiens

<400> 167
  Leu Val Thr Pro Pro Ser Gly Gly Glu Thr Gly Asp His Gly Asn Met
   1                5                   10                     15
  Gly Gln Leu Pro Arg Arg Ala Leu Ala Leu Gln Asn Ser Thr Gln Gly
                  20                   25                     30
  Ile Leu Gly Pro Gly Ala Glu Leu Pro Val Ser Val Glu Lys Asp Lys
            35                   40                   45
  Val His Gly Asp Pro Ala Ser Asn Ile Arg Met Ala Met Pro Gly Thr
        50                   55                   60
  Arg Phe Pro Leu Cys Ser Cys Arg Ile Pro Cys Gln Pro Gly Gly Ile
   65                   70                   75                    80
  His
```

```
<210> 168
<211> 32
<212> PRT
<213> Homo sapiens

<400> 168
  Glu Gly Leu Leu His Cys Arg Ile Pro Leu Lys Gly Ser Trp Val Gln
   1                5                   10                     15
  Glu Pro Ser Cys Gln Tyr Gln Trp Arg Arg Thr Arg Cys Met Gly Ile
                  20                   25                     30
```

```
<210> 169
<211> 29
<212> PRT
<213> Homo sapiens

<400> 169
Gln Asn Ser Thr Gln Gly Ile Leu Gly Pro Gly Ala Glu Leu Pro Val
1               5                   10                  15

Ser Val Glu Lys Asp Lys Val His Gly Asp Pro Ala Ser
            20                  25


<210> 170
<211> 42
<212> PRT
<213> Homo sapiens

<400> 170
Phe Gly Thr Arg Lys Lys Tyr His Leu Cys Met Ile Pro Asn Leu Asp
1               5                   10                  15

Leu Asn Leu Asp Arg Asp Leu Val Leu Pro Asp Val Ser Tyr Gln Val
            20                  25                  30

Glu Ser Ser Glu Glu Asp Gln Ser Gln Thr
        35                  40


<210> 171
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 171
Phe Leu Leu Ser Leu Gly Ser Leu Val Met Leu Leu Gln Asp Leu Val
1               5                   10                  15

His Ser Glu Leu Asp Gly Thr Leu His Tyr Thr Val Ala Leu His Lys
            20                  25                  30

Asp Gly Ile Glu Met Ser Cys Glu Gln Ser Ile Asp Ser Pro Asp Phe
        35                  40                  45

His Leu Leu Asp Trp Lys Cys Thr Val Glu Ile His Lys Glu Lys Lys
    50                  55                  60

Gln Gln Ser Leu Ser Leu Arg Ile His Ser Leu Arg Leu Ile Leu Leu
65              70                  75                  80

Thr Gly Phe His Leu Ile Thr Xaa Ile Trp Lys His Gln Ile Ser Ile
                85                  90                  95
```

Gln Ile Glu Ile Gln Ile Gly Tyr His Thr Gln Met Val Phe Phe Pro
            100   105   110

Arg Ala Glu
        115

<210> 172
<211> 26
<212> PRT
<213> Homo sapiens

<400> 172
Val His Ser Glu Leu Asp Gly Thr Leu His Tyr Thr Val Ala Leu His
  1   5   10   15

Lys Asp Gly Ile Glu Met Ser Cys Glu Gln
            20   25

<210> 173
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 173
Gln Ser Leu Ser Leu Arg Ile His Ser Leu Arg Leu Ile Leu Leu Thr
  1   5   10   15

Gly Phe His Leu Ile Thr Xaa Ile Trp Lys His Gln
            20   25

<210> 174
<211> 340
<212> PRT
<213> Homo sapiens

<400> 174
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Thr Ala Cys Ser Ser
  1   5   10   15

Ala Cys Ile Cys Phe Cys Asp Arg Gly Pro Cys Leu Gly Trp Asn Asp
            20   25   30

Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr
        35   40   45

Asp Arg Tyr Thr Thr Ser Arg Ser Trp Ile Pro Ser His Ser Pro Gln
    50   55   60

Leu Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys

```
        65                      70                      75                      80

Val Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp
                     85                  90                  95

Glu Cys Lys Thr Asp Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val
                100                 105                 110

Val Ser Cys Glu Gly Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg
        115                 120                 125

Gly Ser Cys Gly Leu Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu
    130                 135                 140

Gln Lys Leu Lys Glu Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser
145                 150                 155                 160

Asp Tyr Tyr Tyr Lys Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly
                165                 170                 175

Leu Ile Thr Ile Val Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys
                180                 185                 190

Leu Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr
        195                 200                 205

Pro Pro Phe Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro
    210                 215                 220

Pro Pro Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly
225                 230                 235                 240

His Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly
                245                 250                 255

Tyr Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Leu Gly Gly Gly
            260                 265                 270

Ile Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser
        275                 280                 285

Asp Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp
    290                 295                 300

Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val
305                 310                 315                 320

Cys Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly
                325                 330                 335

Thr Arg Arg Arg
            340


<210> 175
<211> 24
<212> PRT
<213> Homo sapiens
```

```
<400> 175
Ala Cys Ser Ser Ala Cys Ile Cys Phe Cys Asp Arg Gly Pro Cys Leu
  1               5                  10                      15

Gly Trp Asn Asp Pro Asp Arg Met
             20


<210> 176
<211> 26
<212> PRT
<213> Homo sapiens

<400> 176
Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln Asn
  1               5                  10                      15

Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp
             20                  25


<210> 177
<211> 32
<212> PRT
<213> Homo sapiens

<400> 177
Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu
  1               5                  10                      15

Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys
             20                  25                      30


<210> 178
<211> 28
<212> PRT
<213> Homo sapiens

<400> 178
Tyr Lys Leu Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser
  1               5                  10                      15

Glu Tyr Pro Pro Phe Ser His Arg Tyr Gln Arg Phe
             20                  25


<210> 179
<211> 26
<212> PRT
<213> Homo sapiens

<400> 179
Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile
```

```
 1              5              10             15
Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala
              20             25


<210> 180
<211> 25
<212> PRT
<213> Homo sapiens

<400> 180
Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val
 1              5              10             15

Cys Ser Asn Ser Asp Thr Lys Thr Arg
              20             25


<210> 181
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 181
Thr Glu Ser Gln Met Lys Cys Phe Leu Gly Asn Ser His Asp Thr Ala
 1              5              10             15

Pro Arg His Thr Cys Ser Gly Gln Gly Leu His Gly Gly Xaa Xaa Xaa
              20             25             30

Thr Ala Pro Leu Arg Ala Leu Gln Gln His Ser Gln Asp Gly Lys Leu
         35             40             45

Cys Thr Asn Ser Leu Pro Ala Ala Arg Gly Gly Pro His Lys His Val
      50             55             60

Val Val Thr Val Val Tyr Ser Val Lys His Trp Lys Pro Thr Glu Arg
 65             70             75             80

Ser Ser Val Ser Ile Lys Lys Glu Glu Glu Thr Asp Trp Asp Met Asp
              85             90             95
```

```
Gln Leu Ser Lys Gln Arg Thr Thr Tyr Glu Met Lys Ser Gly Ser Ser
            100                 105                 110

Gly Val Gln Thr Glu Glu Leu Arg His Pro Ser Leu
        115                 120
```

```
<210> 182
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 182
Asn Ala Ser Trp Glu Ile His Met Thr Gln Arg His Val Ile Pro Xaa
  1               5                  10                  15

Leu Ala Arg Ala Ser Met Xaa Val Xaa Xaa Xaa Gln Arg Pro Ser Glu
            20                  25                  30

Leu Cys Ser Ser Ile Arg Arg Met Ala Asn Ser Ala Gln Ile Val Phe
            35                  40                  45

Pro Leu Pro Val Gly Ala Pro Thr Asn Thr Leu Ser Ser Leu Leu Tyr
        50                  55                  60

Thr Val Leu Asn Thr Gly Asn Gln Gln Lys Glu Ala Val
  65                  70                  75

<210> 183
<211> 30
<212> PRT
<213> Homo sapiens
```

<400> 183
Ala Pro Leu Arg Ala Leu Gln Gln His Ser Gln Asp Gly Lys Leu Cys
1   5   10   15

Thr Asn Ser Leu Pro Ala Ala Arg Gly Gly Pro His Lys His
            20   25   30

<210> 184
<211> 27
<212> PRT
<213> Homo sapiens

<400> 184
Arg Ser Ser Val Ser Ile Lys Lys Glu Glu Glu Thr Asp Trp Asp Met
1   5   10   15

Asp Gln Leu Ser Lys Gln Arg Thr Thr Tyr Glu
            20   25

<210> 185
<211> 29
<212> PRT
<213> Homo sapiens

<400> 185
Leu Cys Ser Ser Ile Arg Arg Met Ala Asn Ser Ala Gln Ile Val Phe
1   5   10   15

Pro Leu Pro Val Gly Ala Pro Thr Asn Thr Leu Ser Ser
            20   25

<210> 186
<211> 17
<212> PRT
<213> Homo sapiens

<400> 186
Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys Leu Gln
1   5   10   15

Leu

<210> 187
<211> 67
<212> PRT
<213> Homo sapiens

<400> 187
Gly Ser Cys Phe Ala Thr Trp Ala Phe Ile Gln Lys Asn Thr Asn His
1   5   10   15

Arg Cys Val Ser Ile Tyr Leu Ile Asn Leu Leu Thr Ala Asp Phe Leu

```
                20                  25                  30

Leu Thr Leu Ala Leu Pro Val Lys Ile Val Val Asp Leu Gly Val Ala
            35                  40                  45

Pro Trp Lys Leu Lys Ile Phe His Cys Gln Val Thr Ala Cys Leu Ile
        50                  55                  60

Tyr Ile Asn
 65
```

```
<210> 188
<211> 31
<212> PRT
<213> Homo sapiens
```

```
<400> 188
Lys Asn Thr Asn His Arg Cys Val Ser Ile Tyr Leu Ile Asn Leu Leu
 1               5                  10                  15

Thr Ala Asp Phe Leu Leu Thr Leu Ala Leu Pro Val Lys Ile Val
            20                  25                  30
```

```
<210> 189
<211> 17
<212> PRT
<213> Homo sapiens
```

```
<400> 189
Lys His Thr Val Glu Thr Arg Ser Val Ala Phe Arg Lys Gln Leu Asn
 1               5                  10                  15

Arg
```

```
<210> 190
<211> 30
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 190
Pro Gln Val Leu His Leu Arg Trp Leu Pro Lys Val Leu Gly Tyr Arg
 1               5                  10                  15

Ser Xaa Pro Leu Arg Leu Ala Asp Pro Ser Thr Phe Xaa Met
```

<210> 191
<211> 131
<212> PRT
<213> Homo sapiens

<400> 191

```
Gln Leu Leu Gly Phe Glu Gly Asn Asp Ser Ala Gly Glu Arg Arg Trp
  1               5                  10                  15

Arg Gly Ala Asn Met Gln Ile Pro Leu Leu Gln Val Ala Leu Pro Leu
             20                  25                  30

Ser Thr Glu Glu Gly Thr Gly Pro Ser Gly Pro Thr Gln Pro Ser Pro
         35                  40                  45

Gln Gly Glu Val Arg Phe Leu Arg Ser Pro Arg Met Gly Gly Gln Val
     50                  55                  60

Pro His Trp Glu Trp Arg Ser His Ser Leu Pro Trp Val Leu Thr Ser
 65                  70                  75                  80

Thr Leu Ser Gly Cys Glu Gly Asp Leu Pro Gly Phe Pro His Gln Val
                 85                  90                  95

Gln Leu Pro Ala Ala Glu Ser His Thr Leu Asn Thr Gly Leu Leu Arg
            100                 105                 110

Ser Asp Thr Gly Gln Phe Thr Pro Cys Leu Lys Leu Ala Phe Glu Arg
            115                 120                 125

Pro Ser Gly
        130
```

<210> 192
<211> 24
<212> PRT
<213> Homo sapiens

<400> 192

```
Asn Asp Ser Ala Gly Glu Arg Arg Trp Arg Gly Ala Asn Met Gln Ile
  1               5                  10                  15

Pro Leu Leu Gln Val Ala Leu Pro
                 20
```

<210> 193
<211> 29
<212> PRT
<213> Homo sapiens

<400> 193

```
Pro Ser Pro Gln Gly Glu Val Arg Phe Leu Arg Ser Pro Arg Met Gly
  1               5                  10                  15
```

Gly Gln Val Pro His Trp Glu Trp Arg Ser His Ser Leu
                20   25

<210> 194
<211> 27
<212> PRT
<213> Homo sapiens

<400> 194
His Gln Val Gln Leu Pro Ala Ala Glu Ser His Thr Leu Asn Thr Gly
  1   5   10   15

Leu Leu Arg Ser Asp Thr Gly Gln Phe Thr Pro
                20   25

<210> 195
<211> 60
<212> PRT
<213> Homo sapiens

<400> 195
Ala Pro Leu Glu Thr Met Gln Asn Lys Pro Arg Ala Pro Gln Lys Arg
  1   5   10   15

Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp Tyr Ala Ser Val Leu
                20   25   30

Thr Arg Tyr Ser Leu Gly Leu Arg Asn Lys Glu Pro Ser Leu Gly His
          35   40   45

Arg Trp Gly Thr Gln Lys Leu Gly Arg Ser Pro Cys
      50   55   60

<210> 196
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 196

```
Met Gln Asn Lys Pro Arg Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro
 1               5                  10                  15

Glu Leu Glu Leu Arg Asp Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu
            20                  25                  30

Gly Leu Arg Asn Lys Glu Pro Ser Leu Gly His Arg Trp Gly Thr Gln
        35                  40                  45

Lys Leu Gly Arg Ser Pro Cys Ser Glu Gly Ser Gln Gly His Thr Thr
    50                  55                  60

Asp Ala Ala Asp Val Gln Asn His Ser Lys Glu Glu Gln Arg Asp Ala
65                  70                  75                  80

Gly Ala Gln Arg Xaa Cys Gly Gln Gly Arg His Thr Trp Ala Tyr Arg
                85                  90                  95

Xaa Gly Ala Gln Asp Thr Ser Arg Leu Thr Gly Asp Pro Arg Gly Gly
            100                 105                 110

Glu Arg Ser Pro Pro Lys Cys Gln Ser Met Lys Gln Gln Glu Gly Ala
            115                 120                 125

Pro Ser Gly His Cys Trp Asp Gln Trp Cys His Gly Ala Ser Glu Val
    130                 135                 140

Val Trp Pro Glu Ser Arg Lys Arg Ala Gln Ile Phe Xaa Ser Pro Cys
145                 150                 155                 160

Arg Gln Ser Pro Arg Ser Ser Ala Leu Gly Ala Gly Gln Lys Leu Ala
                165                 170                 175

Val Cys Ser Pro Asp Ile Leu Cys Cys Pro Thr Asp Thr Leu Leu Ala
            180                 185                 190

Ser His Pro His Ser Leu Leu Thr Gly Thr Gln Phe Ser Gly Gln Thr
            195                 200                 205

Gln Ala Leu Ala Pro Ser Trp Cys Ala
    210                 215


<210> 197
<211> 26
<212> PRT
<213> Homo sapiens

<400> 197
Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp
 1               5                  10                  15

Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu
            20                  25


<210> 198
<211> 27
```

<212> PRT
<213> Homo sapiens

<400> 198
Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp
 1   5   10   15

Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu Gly
            20   25

<210> 199
<211> 29
<212> PRT
<213> Homo sapiens

<400> 199
Leu Gly Arg Ser Pro Cys Ser Glu Gly Ser Gln Gly His Thr Thr Asp
 1   5   10   15

Ala Ala Asp Val Gln Asn His Ser Lys Glu Glu Gln Arg
            20   25

<210> 200
<211> 25
<212> PRT
<213> Homo sapiens

<400> 200
Thr Asp Thr Leu Leu Ala Ser His Pro His Ser Leu Leu Thr Gly Thr
 1   5   10   15

Gln Phe Ser Gly Gln Thr Gln Ala Leu
            20   25

<210> 201
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 201

```
Ile Ala Gln Val Leu Lys Ala Glu Met Cys Leu Val Xaa Arg Pro His
 1               5                   10                  15

Pro Xaa Leu Leu Asp Ser His Arg Gly Trp Ala Gly Glu Thr Leu Arg
                20                  25                  30

Gly Gln Gly Arg Gln Glu Xaa Glu Ser Asp Thr Lys Ala Gly Thr Leu
            35                  40                  45

Gln Leu Gln Arg Gln Ala Pro Leu Pro Leu Thr Gln His Ser Leu Val
        50                  55                  60

Leu Pro Ile Ser Pro Gly Pro Ser Asn His Thr Gln Ser
 65                 70                  75
```

```
<210> 202
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 202
Arg Gly Trp Ala Gly Glu Thr Leu Arg Gly Gln Gly Arg Gln Glu Xaa
 1               5                   10                  15

Glu Ser Asp Thr
            20


<210> 203
<211> 20
<212> PRT
<213> Homo sapiens

<400> 203
Ala Pro Leu Pro Leu Thr Gln His Ser Leu Val Leu Pro Ile Ser Pro
 1               5                   10                  15

Gly Pro Ser Asn
            20


<210> 204
<211> 166
<212> PRT
<213> Homo sapiens

<400> 204
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
 1               5                   10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
            20                  25                  30
```

```
Cys Trp Pro Cys Leu His Gln Trp Leu Glu Thr Arg Pro Glu Arg Gln
         35                  40                  45

Glu Cys Pro Val Cys Lys Ala Gly Ile Ser Arg Glu Lys Val Val Pro
     50                  55                  60

Leu Tyr Gly Arg Gly Ser Gln Lys Pro Gln Asp Pro Arg Leu Lys Thr
 65                  70                  75                  80

Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly Gly
                 85                  90                  95

Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly Val
             100                 105                 110

Gly Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu
             115                 120                 125

Pro Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala
             130                 135                 140

Ser Ser Trp Gln Asp Ser Leu Phe Leu Phe Leu Ala Ile Phe Phe Phe
145                 150                 155                 160

Phe Trp Leu Leu Ser Ile
                 165


<210> 205
<211> 149
<212> PRT
<213> Homo sapiens

<400> 205
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
 1               5                   10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
             20                  25                  30

Cys Trp Pro Cys Leu His Gln Trp Leu Glu Thr Arg Pro Glu Arg Gln
         35                  40                  45

Glu Cys Pro Val Cys Lys Ala Gly Ile Ser Arg Glu Lys Val Val Pro
     50                  55                  60

Leu Tyr Gly Arg Gly Ser Gln Lys Pro Gln Asp Pro Arg Leu Lys Thr
 65                  70                  75                  80

Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly Gly
                 85                  90                  95

Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly Val
             100                 105                 110

Gly Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu
             115                 120                 125
```

```
Pro Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala
    130                 135                 140

Ser Ser Trp Gln Asp
145
```

<210> 206
<211> 41
<212> PRT
<213> Homo sapiens

<400> 206
```
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
  1               5                   10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
              20                  25                  30

Cys Trp Pro Cys Leu His Gln Trp Leu
          35                  40
```

<210> 207
<211> 38
<212> PRT
<213> Homo sapiens

<400> 207
```
Glu Thr Arg Pro Glu Arg Gln Glu Cys Pro Val Cys Lys Ala Gly Ile
  1               5                   10                  15

Ser Arg Glu Lys Val Val Pro Leu Tyr Gly Arg Gly Ser Gln Lys Pro
              20                  25                  30

Gln Asp Pro Arg Leu Lys
          35
```

<210> 208
<211> 34
<212> PRT
<213> Homo sapiens

<400> 208
```
Thr Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly
  1               5                   10                  15

Gly Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly
              20                  25                  30

Val Gly
```

<210> 209
<211> 36

```
<212> PRT
<213> Homo sapiens

<400> 209
Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu Pro
  1               5                  10                  15

Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala Ser
             20                  25                  30

Ser Trp Gln Asp
         35


<210> 210
<211> 15
<212> PRT
<213> Homo sapiens

<400> 210
Gly Leu Ser Thr Gly Pro Asp Met Ala Ser Leu Asp Leu Phe Val
  1               5                  10                  15


<210> 211
<211> 97
<212> PRT
<213> Homo sapiens

<400> 211
Gly Arg Pro Thr Arg Pro Ser Gln Ala Thr Arg His Phe Leu Leu Gly
  1               5                  10                  15

Thr Leu Phe Thr Asn Cys Leu Cys Gly Thr Phe Cys Phe Pro Cys Leu
             20                  25                  30

Gly Cys Gln Val Ala Ala Asp Met Asn Glu Cys Cys Leu Cys Gly Thr
         35                  40                  45

Ser Val Ala Met Arg Thr Leu Tyr Arg Thr Arg Tyr Gly Ile Pro Gly
      50                  55                  60

Ser Ile Cys Asp Asp Tyr Met Ala Thr Leu Cys Cys Pro His Cys Thr
 65                  70                  75                  80

Leu Cys Gln Ile Lys Arg Asp Ile Asn Arg Arg Arg Ala Met Arg Thr
                 85                  90                  95

Phe


<210> 212
<211> 146
<212> PRT
<213> Homo sapiens

<400> 212
```

```
Ile Lys Asn Leu Ile Phe Phe Met Pro Ser Val Val Leu Lys His Ile
 1                   5                  10                  15

His His Ile Ser Val Ala Lys Asp Gly Glu Glu Leu Lys Leu Lys Arg
                20                  25                  30

Cys Leu Leu Asn Phe Val Ala Ser Val Arg Ala Phe His His Gln Phe
            35                  40                  45

Leu Glu Ser Thr His Gly Ser Pro Ser Val Asp Ile Ser Leu Asp Leu
        50                  55                  60

Ala Lys Ser Thr Met Arg Thr Ala Lys Ser Cys His Ile Val Ile Thr
65                  70                  75                  80

Asn Arg Ser Arg Asp Ala Ile Ser Gly Pro Val Glu Ser Pro His Cys
                85                  90                  95

Asp Ala Cys Ser Thr Gln Thr Ala Phe Ile His Ile Ser Cys Asn Leu
            100                 105                 110

Thr Pro Lys Ala Arg Glu Thr Lys Cys Ala Thr Glu Thr Ile Ser Lys
        115                 120                 125

Gln Gly Ser Glu Gln Glu Met Ser Cys Gly Leu Gly Arg Thr Arg Gly
    130                 135                 140

Ser Thr
145


<210> 213
<211> 23
<212> PRT
<213> Homo sapiens

<400> 213
Phe Leu Leu Gly Thr Leu Phe Thr Asn Cys Leu Cys Gly Thr Phe Cys
 1                   5                  10                  15

Phe Pro Cys Leu Gly Cys Gln
            20


<210> 214
<211> 24
<212> PRT
<213> Homo sapiens

<400> 214
Ser Ile Cys Asp Asp Tyr Met Ala Thr Leu Cys Cys Pro His Cys Thr
 1                   5                  10                  15

Leu Cys Gln Ile Lys Arg Asp Ile
            20


<210> 215
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<211> 30
<212> PRT
<213> Homo sapiens

<400> 215
Ser Val Val Leu Lys His Ile His His Ile Ser Val Ala Lys Asp Gly
1   5   10   15

Glu Glu Leu Lys Leu Lys Arg Cys Leu Leu Asn Phe Val Ala
            20   25   30

<210> 216
<211> 26
<212> PRT
<213> Homo sapiens

<400> 216
Asn Phe Val Ala Ser Val Arg Ala Phe His His Gln Phe Leu Glu Ser
1   5   10   15

Thr His Gly Ser Pro Ser Val Asp Ile Ser
            20   25

<210> 217
<211> 28
<212> PRT
<213> Homo sapiens

<400> 217
Thr Ala Phe Ile His Ile Ser Cys Asn Leu Thr Pro Lys Ala Arg Glu
1   5   10   15

Thr Lys Cys Ala Thr Glu Thr Ile Ser Lys Gln Gly
            20   25

<210> 218
<211> 6
<212> PRT
<213> Homo sapiens

<400> 218
Met Lys Gly Glu Ile Glu
1   5

<210> 219
<211> 14
<212> PRT
<213> Homo sapiens

<400> 219
Glu Phe Gly Thr Ser Arg Gly Arg Gln His Arg Ala Leu Glu
1   5   10

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<210> 220
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 220
His Gln Thr Pro Gly Val Thr Gly Leu Ser Ala Val Glu Met Asp Gln
  1               5                  10                  15

Ile Thr Pro Ala Leu Trp Glu Ala Leu Ala Ile Asp Thr Leu Arg Lys
                 20                  25                  30

Leu Arg Ile Gly Thr Arg Arg Pro Arg Ile Arg Trp Gly Gln Glu Ala
             35                  40                  45

His Val Pro Ala Gly Ala Ala Gln Glu Gly Pro Leu His Leu Leu Leu
         50                  55                  60

Gln Arg Pro Ala Pro Trp Gly Xaa Ala Pro His Gly Lys Ala Cys Gly
 65                  70                  75                  80




<210> 221
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 221
Gly Leu Gly Gln Gly Gly Gln Gly Leu Asp Gly Gly Arg Lys Leu Met
  1               5                  10                  15

Tyr Leu Gln Glu Leu Pro Arg Arg Asp His Tyr Ile Phe Tyr Cys Lys
                 20                  25                  30

Asp Gln His His Gly Gly Xaa Leu His Met Gly Lys Leu Val Gly Arg
             35                  40                  45

Asn Ser Asp Thr Asn Arg Glu Ala Leu Glu Glu Phe Lys Lys Leu Val
         50                  55                  60

Gln Arg Lys Gly Leu Ser Glu Glu Asp Ile Phe Thr Pro Leu Gln Thr
 65                  70                  75                  80

Gly Ser Cys Val Pro Glu His
                 85
```

```
<210> 222
<211> 176
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 222
Ser Gly Pro Ser Arg Leu Arg Thr Ser Leu Ser His Pro Val Ser Asp
  1               5                  10                  15

Val Arg Ala Thr Ser Pro Pro Gly Arg Arg Gly Gln Pro Leu Leu Gly
               20                  25                  30

Gly Gly Gln Ser Trp Gly Pro Gly Lys Arg Ala Ala Trp Ala Leu Ser
           35                  40                  45

Thr Cys Gly Gly Trp Cys Thr Gly Val Gly Gly Gly Gly Xaa Trp Gly
       50                  55                  60

Trp Glu Trp Gly Arg Gly Ser Gln Ala Leu Tyr Leu Pro Gly Ser Ser
 65                  70                  75                  80

Val Phe Arg Xaa Arg Ile Phe Phe Trp Met His Arg Ser Ser Leu Met
               85                  90                  95

Lys Val Asn Val Ala Ser Asn Phe Pro Pro Pro Arg Ala Val Thr Phe
               100                 105                 110

Thr Gly Asp Thr Phe Trp Ala Ser Cys Leu Arg Lys Val Leu Ser Thr
           115                 120                 125

Thr Met Ala Phe Thr Tyr Gln Val Pro Val Ile Ser Ser Ser Xaa Arg
       130                 135                 140

Val Lys Asp Arg Ala Ala Ala Xaa Pro Ser Val Thr Pro Arg Asn Arg
145                 150                 155                 160
```

```
Val Phe Ile Ser Arg Ala Leu Cys Cys Arg Pro Arg Leu Val Pro Asn
              165                 170                 175
```

```
<210> 223
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 223
Gly Leu Pro Glu Gly Arg Arg Asp Leu Val His Leu Asp Cys Gly Gln
  1               5                 10                  15

Ala Cys His Thr Arg Cys Leu Met Ser Gly Pro Pro Ala Pro Gln Glu
              20                  25                  30

Gly Glu Ala Ser Pro Ser Leu Glu Val Gly Arg Ala Gly Ala Leu Ala
          35                  40                  45

Lys Gly Gln Pro Gly His Ser Leu Pro Val Glu Ala Gly Ala Leu Gly
      50                  55                  60

Leu Ala Val Gly Glu Gly Gly Gly Gly Xaa Gly Gly Gly Ala His Arg
 65                  70                  75                  80

Arg Cys Ile Cys Gln Ala Pro Pro Ser Ser Ala Xaa Gly Phe Ser Ser
                  85                  90                  95

Gly Cys Thr Asp Pro Pro Ser
              100
```

```
<210> 224
<211> 30
<212> PRT
<213> Homo sapiens

<400> 224
Val Glu Met Asp Gln Ile Thr Pro Ala Leu Trp Glu Ala Leu Ala Ile
  1               5                 10                  15

Asp Thr Leu Arg Lys Leu Arg Ile Gly Thr Arg Arg Pro Arg
              20                  25                  30
```

```
<210> 225
<211> 23
<212> PRT
<213> Homo sapiens

<400> 225
Arg Lys Leu Met Tyr Leu Gln Glu Leu Pro Arg Arg Asp His Tyr Ile
 1               5                  10                  15

Phe Tyr Cys Lys Asp Gln His
            20


<210> 226
<211> 23
<212> PRT
<213> Homo sapiens

<400> 226
Glu Ala Leu Glu Glu Phe Lys Lys Leu Val Gln Arg Lys Gly Leu Ser
 1               5                  10                  15

Glu Glu Asp Ile Phe Thr Pro
            20


<210> 227
<211> 27
<212> PRT
<213> Homo sapiens

<400> 227
Arg Ala Thr Ser Pro Pro Gly Arg Arg Gly Gln Pro Leu Leu Gly Gly
 1               5                  10                  15

Gly Gln Ser Trp Gly Pro Gly Lys Arg Ala Ala
            20                  25


<210> 228
<211> 29
<212> PRT
<213> Homo sapiens

<400> 228
Phe Phe Trp Met His Arg Ser Ser Leu Met Lys Val Asn Val Ala Ser
 1               5                  10                  15

Asn Phe Pro Pro Pro Arg Ala Val Thr Phe Thr Gly Asp
            20                  25


<210> 229
<211> 28
<212> PRT
<213> Homo sapiens

<400> 229
```

```
Cys Leu Met Ser Gly Pro Pro Ala Pro Gln Glu Gly Glu Ala Ser Pro
 1                   5                  10                      15

Ser Leu Glu Val Gly Arg Ala Gly Ala Leu Ala Lys
             20                  25
```